

THE YOUNG FARMER'S ALMANAC.

—❧1886❧—

Prepared for the latitude of the New England
States and New York.

A FARMER'S CALENDAR

—WITH—

USEFUL FARM HINTS

FOR EVERY MONTH IN THE YEAR, AND VALUABLE INFORMATION FOR EVERY FARMER.

PREPARED BY

THE DOLE FERTILIZER CO.,

MANUFACTURERS OF AND DEALERS IN

DOLE'S CELEBRATED FERTILIZERS.

Perfect Food for Fruit Trees and Vines, Perfect Lawn

Dressing, Bug and Worm Repellent, Currant

Worm Exterminator, Insect De-
stroyer, Canker Worm

Ink, Disinfectant,

Poultry Invigorator, Oyster Shells, Cracked Bone, Bone
Meal, Ground Beef Scraps for Poultry, &c., &c.

OFFICE, 120 COMMERCE STREET, - - - BOSTON, MASS.

1886

	JAN.							JULY						
	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
	..	..	..	..	..	1	2	..	..	..	..	1	2	3
	3	4	5	6	7	8	9	4	5	6	7	8	9	10
	10	11	12	13	14	15	16	11	12	13	14	15	16	17
	17	18	19	20	21	22	23	18	19	20	21	22	23	24
	24	25	26	27	28	29	30	25	26	27	28	29	30	31
	31	..	..	..	..	..	..	..	..	..	..	..	..	..
	FEB.							AUGUST						
	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
	..	1	2	3	4	5	6	1	2	3	4	5	6	7
	7	8	9	10	11	12	13	8	9	10	11	12	13	14
	14	15	16	17	18	19	20	15	16	17	18	19	20	21
	21	22	23	24	25	26	27	22	23	24	25	26	27	28
	28	..	..	..	..	..	..	29	30	31	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	MARCH							SEPT'R						
	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
	..	1	2	3	4	5	6	..	..	..	1	2	3	4
	7	8	9	10	11	12	13	5	6	7	8	9	10	11
	14	15	16	17	18	19	20	12	13	14	15	16	17	18
	21	22	23	24	25	26	27	19	20	21	22	23	24	25
	28	29	30	31	..	..	..	26	27	28	29	30	..	..
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	APRIL							OCT'R						
	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
	..	..	..	..	1	2	3	..	..	..	..	..	1	2
	4	5	6	7	8	9	10	3	4	5	6	7	8	9
	11	12	13	14	15	16	17	10	11	12	13	14	15	16
	18	19	20	21	22	23	24	17	18	19	20	21	22	23
	25	26	27	28	29	30	..	24	25	26	27	28	29	30
	..	..	..	..	..	..	..	31	..	..	..	..	..	..
	MAY							NOV'R						
	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
	..	..	..	..	..	..	1	..	1	2	3	4	5	6
	2	3	4	5	6	7	8	7	8	9	10	11	12	13
	9	10	11	12	13	14	15	14	15	16	17	18	19	20
	16	17	18	19	20	21	22	21	22	23	24	25	26	27
	23	24	25	26	27	28	29	28	29	30	..	..	..	..
	30	31	..	..	..	..	..	..	..	..	..	..	..	..
	JUNE							DEC'R						
	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
	..	..	1	2	3	4	5	..	..	..	1	2	3	4
	6	7	8	9	10	11	12	5	6	7	8	9	10	11
	13	14	15	16	17	18	19	12	13	14	15	16	17	18
	20	21	22	23	24	25	26	19	20	21	22	23	24	25
	27	28	29	30	..	..	..	26	27	28	29	30	31	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..

 This company has no connection with the so-called "Common Sense Fertilizer Co." and is entirely distinct from it. If you want OUR goods be sure that they are marked "Dole Fertilizer Co."

The true method of maintaining the productiveness of the soil is to return to it those elements of fertility which have been taken up by the crops previously grown upon it.

THE DOLE FERTILIZER CO.

MANUFACTURERS OF

DOLE'S CELEBRATED FERTILIZERS

AND

DOLE'S PERFECT LAWN DRESSING.

Also Dealers in

GROUND BONE, POTASH, PLASTER, AND OTHER FERTILIZERS,
AGRICULTURAL CHEMICALS AND FERTILIZING MATERIALS—

DISINFECTANTS, POULTRY INVIGORATOR, CRACKED

BONE, GROUND SCRAPS, CRACKED

OYSTER-SHELLS, ETC.

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BOSTON HARBOR.

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W. H. DOLE, Superintendent. J. H. LATHROP, Treasurer.

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If interested in farming, please preserve this for future reference. If not, please pass it to some one who is.

READ AND REFLECT.

A HIGH PRICE IS NOT ALWAYS A GUARANTEE OF GOOD QUALITY.

MASSACHUSETTS COMMERCE & TRADE DEPARTMENT

THE STATE OF MASSACHUSETTS

IN SENATE,

JANUARY 18, 1890.

REPORT

OF THE

COMMISSIONERS OF THE

DEPARTMENT OF COMMERCE AND TRADE

FOR THE YEAR 1889.

BOSTON:

WILLIAM B. EMMETT, PRINTER.

1890.

OFFICE OF THE COMMISSIONER OF COMMERCE AND TRADE,

STATE HOUSE, BOSTON.

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FARM HINTS FOR JANUARY.

With the beginning of the New Year each farmer should decide to reform his system of farming so far as he may have found it to fail in producing the best results. To do this properly, he should have a diary which will give, in detail, the work done in years past, showing the method used in producing each crop, the amount of labor, manure, or money expended on it, and the results thereof.

This will be to him what the chart is to the mariner, showing both the safe channel and the dangerous rocks. If he has not kept such a diary in years past, let him begin now and make that the first step toward reform.

This month the dealers in agricultural implements, seeds and fertilizers will send out their catalogues. Obtain and carefully examine these. The foundation of good crops lies in procuring good seeds, and furnishing plenty of plant food.

Buy your seeds from reputable dealers who grow them with such care that they will prove true to name, and sure to grow.

Artificial fertilizers may often be used to good advantage as an addition to stable manure, or as a substitute therefor. In these it is not always the highest priced that are the best, nor the lowest priced that are the cheapest. Compare the analyses and cost price of the various kinds. Read the testimonials we publish from those who used our fertilizer last year. Poultry keepers should read the page headed "Poultry Invigorator." No stock upon the farm pays better in proportion to first cost, or cost of keeping than poultry if well taken care of. They should have comfortable buildings, well lighted, and made so warm that water will not freeze there during the day. Brush roosts and nests once a month with kerosene to drive away the vermin. Keep well cleaned up under the roosts, and occasionally scatter there a little of Dole's Disinfectant to keep down all bad odors.

Then feed with a mixture of meal and wheat bran, with a little of the Poultry Invigorator. Scald this and feed while warm each morning. At night give whole grain. Keep clean and fresh water by them at all times. It will pay to take extra pains to induce the hens to lay now while eggs bring a good price.

New Moon, 5th day, 2h. 44 m., morning.
First Quarter, 13th day, 7h. 24 m., morning.
Full Moon, 20th day, 2h. 45m., morning.
Last Quarter, 26th day, 8h. 31 m., evening.

Day of Month.	Day of the Week.	 Rises. h. m.	 Sets. h. m.	L'gth of Days. h. m.	 Rises. h. m.
1	Fr.	7 14	4 22	9 8	3 38
2	Sa.	7 14	4 23	9 9	4 35
3	S.	7 14	4 24	9 10	5 29
4	M.	7 14	4 25	9 11	sets
5	Tu.	7 14	4 26	9 12	5 10
6	W.	7 14	4 27	9 13	6 2
7	Th.	7 14	4 28	9 14	6 57
8	Fr.	7 14	4 29	9 15	7 54
9	Sat.	7 14	4 30	9 16	8 51
10	S.	7 13	4 31	9 18	9 48
11	M.	7 13	4 33	9 20	10 47
12	Tu.	7 13	4 34	9 21	11 48
13	W.	7 12	4 35	9 23	morn
14	Th.	7 12	4 36	9 24	0 51
15	Fr.	7 11	4 37	9 26	1 53
16	Sa.	7 11	4 38	9 27	2 59
17	S.	7 10	4 39	9 29	4 6
18	M.	7 10	4 41	9 31	5 10
19	Tu.	7 9	4 42	9 33	rises
20	W.	7 9	4 43	9 34	5 33
21	Th.	7 8	4 44	9 36	6 47
22	Fr.	7 8	4 46	9 38	8 1
23	Sa.	7 7	4 47	9 40	9 12
24	S.	7 6	4 48	9 42	10 21
25	M.	7 5	4 49	9 44	11 27
26	Tu.	7 4	4 51	9 47	morn
27	W.	7 3	4 52	9 49	0 31
28	Th.	7 2	4 53	9 51	1 32
29	Fr.	7 1	4 55	9 54	2 30
30	Sa.	7 0	4 56	9 56	3 25
31	S.	6 59	4 57	9 58	4 16

FARM HINTS FOR FEBRUARY.

Although, in this latitude we have no plowing or planting to do now, yet the farmer will easily find a plenty of work. The care of the farm stock should take up no small part of these short days. Remember that the milch cows now need extra care. Those which are heavy with calf should be watched that they are not injured by slipping upon the icy places, or by being crowded or hooked by other animals. Such injuries are among the frequent causes of abortions. Another frequent cause is the severa drain upon the system in keeping up the supply of milk while growing the frame of the calf. The food should be varied and of such a character as

New Moon, 3d day, 10h. 15m., evening,

First Quarter, 11th day, 9h. 46 m., evening.

Full Moon, 18th day, 1h. 15m., evening.

Last Quarter, 25th day, 0h. 11 m., evening.

to keep the animal thriving though not too fat. Now is the time when a few roots are most valuable for feeding, and no roots are better than carrots and turnips, by reason of the amount of phosphate of lime which they contain. Remember that each 1000 pounds of milk takes from the system of the animal about four pounds of phosphates, and that in addition to this she has to form the bone of the calf. For this reason, a spoonful or more of bone meal should be given each day with the grain. Bone meal is also excellent for young stock in helping them to build up good frames.

Day of Month.	Day of the Week.	 Rises. h. m.	 Sets. h. m.	L'gth of Days. h. m.	 Rises. h. m.
1	M.	6 58	4 59	10 1	5 2
2	Tu.	6 57	5 0	10 3	5 45
3	W.	6 56	5 1	10 5	sets
4	Th.	6 55	5 3	10 8	5 50
5	Fr.	6 54	5 4	10 10	6 45
6	Sa.	6 53	5 5	10 12	7 42
7	S.	6 51	5 6	10 15	8 40
8	M.	6 50	5 8	10 18	9 39
9	Tu.	6 49	5 9	10 20	10 41
10	W.	6 47	5 10	10 23	11 42
11	Th.	6 46	5 12	10 26	morn
12	Fr.	6 45	5 13	10 28	0 44
13	Sa.	6 44	5 14	10 30	1 48
14	S.	6 42	5 15	10 33	2 51
15	M.	6 41	5 17	10 36	3 51
16	Tu.	6 40	5 18	10 38	4 47
17	W.	6 38	5 19	10 41	5 37
18	Th.	6 37	5 21	10 44	rises
19	Fr.	6 35	5 22	10 47	6 45
20	Sa.	6 34	5 23	10 49	7 59
21	S.	6 32	5 24	10 52	9 9
22	M.	6 31	5 26	10 55	10 16
23	Tu.	6 29	5 27	10 58	11 20
24	W.	6 28	5 28	11 0	morn
25	Th.	6 26	5 30	11 4	0 21
26	Fr.	6 25	5 31	11 6	1 19
27	Sa.	6 23	5 32	11 9	2 12
28	S.	6 21	5 33	11 12	3 0

Sheep need a run in the fields in good weather. As the poultry should now be ready to begin laying, if they have not laid during the winter, give them a little of the Poultry Invigorator each morning to stimulate them, and see that they have oyster shells, scraps, etc., all of which we furnish at low rates. Do not oblige them to eat snow, but give fresh water twice a day at least.

Look over all the wagons, carts and tools, and see that they are ready for the spring work. Repair all weak places, and replace all missing bolts, nuts or other parts which may have been lost or worn out. A few minutes' work now, when nothing else could be done, may save the loss of a day from a break-down in a busy time. The harnesses will not be as likely to cause sore shoulders and backs if put in good order. The fertilizer needed for spring may as well be bought and drawn home now while it is good sledding or wheeling. Remember that Dole's 203 Fertilizer is the best article for the price, and the lowest priced for the quality.

FARM HINTS FOR MARCH.

Almost the first duty of the month should be the preparation of a hot bed. The amount of early produce sent into our markets from the South may make it less profitable than it once was for the farmer to force early vegetables for market, but he should at least try to enable his family to enjoy the luxury of an early supply of table vegetables. No artificial fertilizer can be made to take the place of stable manure in creating the "bottom heat" in a hot bed; but a little of Dole's 203 Fertilizer raked in, when sowing the seed, will make the plants more stocky and cause them to throw out more fibrous roots, so that they will bear transplanting better.

New Moon, 5th day, 5h. 4m., evening.

First Quarter, 13th day, 8h. 17 m., morning.

Full Moon, 19th day, 11h. 37 m., evening.

Last Quarter, 27th day, 5h. 44 m., morning.

Day of Month.	Day of the Week.	 Rises.	Sets.	L'gth of Days.	 Rises.
		h. m.	h. m.	h. m.	h. m.

1	M.	6 20	5 35	11 15	3 44
2	Tu.	6 18	5 36	11 18	4 24
3	W.	6 16	5 37	11 21	4 59
4	Th.	6 15	5 38	11 23	5 33
5	Fr.	6 13	5 39	11 26	sets
6	Sa.	6 11	5 40	11 29	6 35
7	S.	6 10	5 42	11 32	7 34
8	M.	6 8	5 43	11 35	8 34
9	Tu.	6 6	5 44	11 38	9 36
10	W.	6 5	5 45	11 40	10 37
11	Th.	6 3	5 46	11 43	11 39
12	Fr.	6 1	5 48	11 47	morn
13	Sa.	6 0	5 49	11 49	0 41
14	S.	5 58	5 50	11 52	1 40
15	M.	5 56	5 51	11 55	2 35
16	Tu.	5 54	5 52	11 58	3 26
17	W.	5 53	5 53	12 0	4 12
18	Th.	5 51	5 55	12 4	4 54
19	Fr.	5 49	5 56	12 7	rises
20	Sa.	5 48	5 57	12 9	6 44
21	S.	5 46	5 58	12 12	7 54
22	M.	5 44	5 59	12 15	9 1
23	Tu.	5 42	6 0	12 18	10 6
24	W.	5 41	6 1	12 20	11 7
25	Th.	5 39	6 2	12 23	morn
26	Fr.	5 37	6 4	12 27	0 3
27	Sa.	5 35	6 5	12 30	0 54
28	S.	5 34	6 12	12 32	1 40
29	M.	5 32	6 7	12 35	2 21
30	Tu.	5 30	6 8	12 38	2 59
31	W.	5 28	6 9	12 41	3 33

Oats may be put in as soon as the ground is dry enough to pulverize in the plowing, and from 200 to 400 pounds of the 203 Fertilizer to the acre, will give a better crop and plumper, heavier grain. For grain crops it is unequalled by any other phosphate in the market. In many sections onions, early peas and potatoes will go in this month. Read the testimonials from market gardeners near Boston. Potatoes do grow larger and smoother, and are less liable to rot upon this fertilizer than upon stable manure. As potato roots run downward, plow the manure in deeply for potatoes, and use the 203 Fertilizer or the Special Potatoe Fertilizer, which is better below the seed. Peas can be grown a week earlier by its use. Onions are a profitable crop, but require heavy manuring. Harrow in from 800 to 1000 pounds of the 203 Fertilizer to the acre, before sowing the seed. As this contains no weed seed, it will be much less work to keep the onions clean while small. As soon as the ground thaws topdress the meadows with the 203 Fertilizer according to directions. A good hay crop is one of the most profitable crops grown when near market. For lawns the Perfect Lawn Dressing has been prepared, and it may be used at any time, but if put on now it will benefit the lawn all the season. Set hens for early chickens, and use the Insect Destroyer in the nests. Canker worms begin to ascend as soon as the ground gets warm, but an early application of Dole's Canker Worm Ink will effectually stop them. Although it remains soft longer than any other preparation of the kind it will need an occasional renewal, especially if the insects are numerous. For directions for its use see page 37.

FARM HINTS FOR APRIL.

The difference in climate between the southern and northern sections of New England, and between an early or a late season, may make it necessary to allow much of the work laid out for one month to lie over until the next, and each seeker after "hints" should look back to those of previous months to see what remains undone. The asparagus bed should be worked over; the rhubarb roots spaded around; the grape vines put upon the trellises, and pruned if it were not done last fall, as less harm is done by spring pruning than by allowing too much wood to remain; the dead wood should be taken out from currants, gooseberries, raspberries and blackberries

New Moon, 4th day, 9h. 31m., morning.

First Quarter, 11th day, 3h. 44 m., evening.

Full Moon, 18th day, 9h. 59m., morning.

Last Quarter, 26th day, 0h. 15 m., morning.

Day of Month.	Day of the Week.	 Rises. h. m.	 Sets. h. m.	L'gth of Days. h. m.	 Rises. h. m.
1	Th.	5 27	6 10	12 43	4 4
2	Fr.	5 25	6 11	12 46	4 34
3	Sa.	5 23	6 12	12 49	5 4
4	S.	5 22	6 14	12 52	sets
5	M.	5 20	6 15	12 55	7 28
6	Tu.	5 18	6 16	12 58	8 30
7	W.	5 17	6 17	13 0	9 33
8	Th.	5 15	6 18	13 3	10 36
9	Fr.	5 13	6 19	13 6	11 35
10	Sa.	5 11	6 20	13 9	morn
11	S.	5 10	6 21	13 11	0 31
12	M.	5 8	6 22	13 14	1 22
13	Tu.	5 7	6 24	13 17	2 8
14	W.	5 5	6 25	13 20	2 50
15	Th.	5 3	6 26	13 23	3 28
16	Fr.	5 2	6 27	13 25	4 4
17	Sa.	5 0	6 28	13 28	4 39
18	S.	4 59	6 29	13 30	rises
19	M.	4 57	6 30	13 33	7 47
20	Tu.	4 55	6 31	13 36	8 51
21	W.	4 54	6 33	13 39	9 50
22	Th.	4 53	6 34	13 41	10 45
23	Fr.	4 51	6 35	13 44	11 34
24	Sa.	4 50	6 36	13 46	morn
25	S.	4 48	6 37	13 49	0 18
26	M.	4 46	6 38	13 52	0 57
27	Tu.	4 45	6 39	13 54	1 32
28	W.	4 44	6 40	13 56	2 4
29	Th.	4 42	6 41	13 59	2 35
30	Fr.	4 41	6 43	14 2	3 4

leaving only last year's shoots to bear fruit, and to all of them should be applied the 203 Fertilizer or Dole's Perfect Food for Fruit Trees and Vines, according to directions given on pages 20, 22. The large amount of bone and of potash used in the Perfect Food makes it the cheapest, because better adapted to these crops, although of higher cost. When the leaves begin to appear on the currant bushes use the Currant Worm Exterminator freely, thus keeping away those pests. It is strange farmers do not grow more of these delicious and health giving small fruits, as they can be grown at small cost, and with little labor. They should be considered a necessity instead of a luxury in every family. Strawberries should be weeded, and the Perfect Food applied liberally. It will make the fruit larger, finer flavored and of better color. The vines will be more stocky and hold the fruit up from the dirt, and the fruit will be firmer and bear transportation to market better. Continue the garden planting. If peas are sown once a week it will give a constant succession through the season of picking. Carrots may be sown this month. Harrow or rake in the 203 Fertilizer before sowing the seed, as it contains no weed seeds and gives the young plants a vigorous start. Do not fail to have all vaults, cesspools, and house drains thoroughly cleaned, and remove all dirt and decayed vegetables from the cellar. Use Dole's Disinfectant freely to remove all germs of disease, and all unwholesome odors. It may save you from Cholera, Typhoid or Typhus Fever, Diphtheria or other kindred diseases which breed in filth and foul air.

FARM HINTS FOR MAY.

Let nothing hinder you from devoting a little time each week to the garden. Put in a few peas and a little sweet corn each week in order to keep up the succession through the summer. Sow a bed of dandelions for next year's cutting, and a little spinach each week, if you would have it through the summer. Set out the later lettuce plants, and the early cabbage plants, for it is as natural that the human race should like a bite of "green stuff" occasionally as it is for the horses and cattle. And a good supply of garden vegetables will not only reduce the butcher's bill, but lessen the chance of a doctor's bill. Do not fail to use the 203 Fertilizer on all garden crops.

New Moon, 3d day, 10h. 42m., evening.

First Quarter, 10th day, 9h. 21m., evening.

Full Moon, 17th day, 8h. 47m., evening.

Last Quarter, 25th day, 6h. 36m., evening.

It will pay well, no matter how rich the land is or how highly manured. If it has been long in cultivation it will be better to use less barn-yard manure on it, and more of the 203.

The cheapest way of growing cabbages is to take land which has been well manured for a previous crop, and put them in, using only the 203 Fertilizer as advised in our directions on page 20. Garden beans, squashes and melons may go in this month. Also field corn and fodder corn. The manure for corn should be fine and well harrowed in or plowed in very lightly, then a little of the 203 Fertilizer in the hill will give a quick start and ensure early maturity. Good crops of corn may be grown on old pastures by the use of the fertilizer alone. Corn sown in drills for fodder is a profitable crop. It may be fed green when pastures run short, put in the silo for ensilage, or cured for winter feeding. From 400 to 600 pounds to the acre of the 203 Fertilizer will grow a good crop without other manure on almost any soil. Such meadows as do not promise a good grass crop may be topdressed with Dole's Grass Fertilizer any time during this month as its composition is such that it is much more rapid in its action after the first rain than the 203 or any ordinary phosphate. If any small spots look as if the grass roots were killed by worms or other cause, sow on the fertilizer and also a little clover and grass seed and rake it in with steel toothed rake. Look now for indications of yellows upon the peach trees or of blight in pear, apple, or quince trees, and if any signs are seen follow directions on page 23. Continue the use of Insect Destroyer for setting hens and broods of chickens.

Day of Month.	Day of the Week.	Rises. h. m.	Sets. h. m.	L'gth of Days. h. m.	Rises. h. m.
1 Sa.	4	40	6 44	14 4	3 34
2 S.	4	38	6 45	14 7	4 4
3 M.	4	37	6 46	14 9	sets
4 Tu.	4	36	6 47	14 11	7 23
5 W.	4	34	6 48	14 14	8 27
6 Th.	4	33	6 49	14 16	9 30
7 Fr.	4	32	6 50	14 18	10 28
8 Sa.	4	31	6 51	14 20	11 21
9 S.	4	29	6 52	14 23	morn
10 M.	4	28	6 53	14 25	0 9
11 Tu.	4	27	6 54	14 27	0 51
12 W.	4	26	6 55	14 29	1 29
13 Th.	4	25	6 56	14 31	2 4
14 Fr.	4	24	6 57	14 33	2 38
15 Sa.	4	23	6 58	14 35	3 12
16 S.	4	22	6 59	14 37	3 46
17 M.	4	21	7 0	14 39	4 24
18 Tu.	4	20	7 1	14 41	rises
19 W.	4	19	7 2	14 43	8 34
20 Th.	4	18	7 3	14 45	9 27
21 Fr.	4	17	7 4	14 47	10 13
22 Sa.	4	17	7 5	14 48	10 55
23 S.	4	16	7 6	14 50	11 32
24 M.	4	15	7 7	14 52	morn
25 Tu.	4	14	7 8	14 54	0 5
26 W.	4	14	7 9	14 55	0 36
27 Th.	4	13	7 10	14 57	1 5
28 Fr.	4	12	7 11	14 59	1 34
29 Sa.	4	12	7 12	15 0	2 3
30 S.	4	11	7 12	15 1	2 34
31 M.	4	11	7 13	15 2	3 8

FARM HINTS FOR JUNE.

Keep the horse hoe and cultivator moving. There is no time when it is so easy to destroy weeds or cure bad habits as when they are so small as not to be noticeable. If any crops are not growing well from lack of manure, hoe in a little of the 203 Fertilizer around them. It is not too late to plant more corn or sow corn fodder to the middle of this month. Good crops of corn and potatoes were grown last year near Boston which were put in after June 15th, the 203 Fertilizer being used in the hill for corn, and Dole's Special Potato Fertilizer for potatoes. Beans are a good field crop where land is cheap and labor plenty. Mangolds may be sown early this month. They make an excellent root for cattle feeding. Meadows which cut but light crops of June grass or daisies, may be mown early, and prepared for sowing millet, or Hungarian grass, or for turnips. They do as well on the 203 Fertilizer as on manure (perhaps a little better), and it takes but little time and labor to fit the land for them. If enough fertilizer is put on to grow a good crop, the land will be left stronger than before, and the manure made from the crop fed out will help to enrich other acres.

New Moon, 2d day, 8h. 55m., morning.

First Quarter, 9th day, 2h. 27m., morning.

Full Moon, 16th day, 8h. 39m., morning.

Last Quarter, 24th day, 11h. 35m., morning.

Day of Month.	Day of the Week.	☺ Rises. h. m.		☾ Sets. h. m.		L'gth of Days. h. m.		☾ Rises. h. m.	
1	Tu.	4	10	7	14	15	4	3	47
2	W.	4	10	7	15	15	5	sets	
3	Th.	4	9	7	15	15	6	8	19
4	Fr.	4	9	7	16	15	7	9	16
5	Sa.	4	9	7	17	15	8	10	7
6	S.	4	8	7	17	15	9	10	52
7	M.	4	8	7	18	15	10	11	32
8	Tu.	4	8	7	19	15	11	morn	
9	W.	4	7	7	19	15	12	0	8
10	Th.	4	7	7	20	15	13	0	42
11	Fr.	4	7	7	20	15	13	1	15
12	Sa.	4	7	7	21	15	14	1	48
13	S.	4	7	7	21	15	14	2	23
14	M.	4	7	7	22	15	15	3	1
15	Tu.	4	7	7	22	15	15	3	42
16	W.	4	7	7	22	15	15	rises	
17	Th.	4	7	7	23	15	16	8	8
18	Fr.	4	7	7	23	15	16	8	52
19	Sa.	4	7	7	23	15	16	9	31
20	S.	4	7	7	23	15	16	10	6
21	M.	4	8	7	24	15	16	10	38
22	Tu.	4	8	7	24	15	16	11	7
23	W.	4	8	7	24	15	16	11	36
24	Th.	4	8	7	24	15	16	morn	
25	Fr.	4	9	7	24	15	15	0	4
26	Sa.	4	9	7	24	15	15	0	34
27	S.	4	10	7	25	15	15	1	5
28	M.	4	10	7	25	15	15	1	40
29	Tu.	4	10	7	24	15	14	2	21
30	W.	4	11	7	24	15	13	3	8

Keep up the plantings of sweet corn. Cabbages, cauliflowers, tomatoes and celery should be set this month. All but the last do better upon the 203 Fertilizer than on stable manure, if the land is in good condition. If peas, spinach, lettuce or other early crops have got out of the way another crop may be obtained by putting in one of these as a second crop. Use the 203 Fertilizer, and save the stable manure for application before fall plowing. It is not too late for planting cucumbers for pickling purposes, or for melons and squashes. When they begin to run, hoe that the roots which strike down at the joints may find food. If the bugs appear, or cut worms are troublesome, use Dole's Bug and Worm Repellent. It kills or drives away all such insects. Keep a lookout on the orchards. Do not allow young trees to injure themselves by overbearing. The fruit will grow larger and sell at better prices if kept well thinned out. Watch for further symptoms of blight, and if any appears, check it at once as directed on pages 22, 23. Commence haying as soon as the grass begins to blossom.

FARM HINTS FOR JULY.

Probably few will have finished haying yet, but it should be pushed on as rapidly as possible. The ease and rapidity with which hay can be harvested since the advent of mowing machines, tedders and horse rakes, makes the job much shorter, and there is not so much grass now that gets "seasoned on the stump," or in other words, which has changed to woody fibre, innutritious and indigestible, as there was a quarter of a century ago. In consequence we have better hay; cows in better condition and giving more milk, and more profit to the farmer. And the practice of

New Moon, 1st day, 5h. 7m., evening.

First Quarter, 8th day, 8h. 18 m., morning.

Full Moon, 15th day, 10h. 9m., evening.

Last Quarter, 24th day, 2h. 21 m., morning.

New Moon, 31st day, 0h. 26m., morning.

Day of Month.	Day of the Week.	 Rises. h. m.	 Sets. h. m.	L'gth of Days. h. m.	 Rises. h. m.
1	Th.	4 11	7 24	15 13	7 3
2	Fr.	4 12	7 24	15 12	7 58
3	Sa.	4 12	7 24	15 12	8 48
4	S.	4 13	7 24	15 11	9 31
5	M.	4 13	7 23	15 10	10 10
6	Tu.	4 14	7 23	15 9	10 45
7	W.	4 15	7 23	15 8	11 19
8	Th.	4 15	7 22	15 7	11 52
9	Fr.	4 16	7 22	15 6	morn
10	Sa.	4 17	7 22	15 5	0 26
11	S.	4 17	7 21	15 4	1 2
12	M.	4 18	7 21	15 3	1 41
13	Tu.	4 19	7 20	15 1	2 24
14	W.	4 20	7 19	14 59	3 11
15	Th.	4 21	7 19	14 58	4 1
16	Fr.	4 22	7 18	14 56	rises
17	Sa.	4 23	7 18	14 55	8 7
18	S.	4 23	7 17	14 54	8 40
19	M.	4 24	7 16	14 52	9 10
20	Tu.	4 25	7 15	14 50	9 39
21	W.	4 26	7 14	14 48	10 7
22	Th.	4 27	7 14	14 47	10 35
23	Fr.	4 28	7 13	14 45	11 5
24	Sa.	4 29	7 12	14 43	11 38
25	S.	4 30	7 11	14 41	morn
26	M.	4 31	7 10	14 39	0 14
27	Tu.	4 32	7 9	14 37	0 57
28	W.	4 33	7 8	14 35	1 47
29	Th.	4 34	7 7	14 33	2 45
30	Fr.	4 35	7 6	14 31	3 50
31	Sa.	4 36	7 5	14 29	sets

beginning earlier and curing the hay less has contributed to the same result. It also gives the farmer more time for other work this month. Millet and Hungarian grass may be put in until nearly the last of the month. With a plenty of the 203 Fertilizer, plenty of hot weather and frequent showers, a good crop may be obtained in six weeks from the time of sowing. Corn sown in drills this month may not reach the stage where it is most valuable for feeding, but it will grow large enough to make good fodder, especially if the pastures dry up late in the fall. Turnips sown this month are better for eating purposes than those sown in June. They do not grow as large, but may stand a little closer in the drill, and the crop will be nearly as large. To get really good ones plow up new ground, and use only the 203 Fertilizer. If intending to set a new strawberry bed this fall, sow the 203 Fertilizer on the old bed as soon as the fruit has been picked, and the runners will form splendid thrifty plants for setting. Harvest the wheat as soon as the grain has passed out of the milky state. If wheat is to be sown this fall, the land should be plowed this month if possible. Kill all weeds before their seeds ripen. If insects are troublesome use the Bug and Worm Repellent. Few, excepting the potato beetle, will remain where it has been applied. A daily use of the Poultry Invigorator will keep the chickens growing, and fit the cockerels for market and the pullets will begin to lay early. If they begin before cold weather sets in, it is easy to keep them laying most of the winter, but to do this they must be stimulated from the first. Use Dole's Disinfectant freely during hot weather, and avoid danger of cholera or fevers.

FARM HINTS FOR AUGUST.

A good farmer will find plenty of work this month. There may be the millet to cut which was sown in June or July, and some of the meadows which were cut early ought to have a second crop worth mowing. It is better to cut all that will pay for mowing than to leave it to die down upon the field. It will enrich the soil more if fed out, and the manure returned to the field than if left on the surface. Rowen hay and millet require more curing than does grass cut in July. Cut millet when the seed is in the milk, and after giving it two days good sun, put in large heaps and let it stand one day to sweat, then air it out; heap again, and let stand over night. Then draw in while hot next day.

First Quarter, 6th day, 4h. 6m., evening.

Full Moon, 14th day, 1h. 24m., evening.

Last Quarter, 22d day, 2h. 42m., evening.

New Moon, 29th day, 7h. 54m., morning.

This will make good hay, but too much sun drying makes it woody, while if put in without the sweating process the coarse stalks often retain moisture enough to make it "smoky."

Mowing fields which are run out can be plowed this month, and reseeded at once, using the 203 Fertilizer or ground bone, with or without a mixture of potash. The bone and potash is the more lasting, but the best results in proportion to cost will be obtained from the 203 Fertilizer. It is

better to seed without sowing grain. Some farmers sow round turnips, three or four pounds of seed to the acre, along with grass seed sown this month, and get a few hundred bushels of roots for market or feeding. They say the turnip does not rob the grass much, as the feeding roots run below the grass roots, and take up what the latter could not reach this year. But if this is done it is safer to be very liberal with the fertilizer. If land has been plowed for sowing wheat this fall, go over it with cultivator or harrow about once a week. This keeps weeds killed, and fits the land for seeding. Strawberries set this month often give a good crop next year. Use plenty of the 203 Fertilizer where they are to be put. Cull out such sheep as are not profitable to keep another winter, and give them extra feed to fit them for market. Keep the swine growing now. There should be waste vegetables and windfall fruit to give them. Remember the remarks made last month about the poultry. A little extra feed and care, with the regular use of the Invigorator, now, is of more importance than it would be in October so far as fitting them for early laying or for early marketing.

Day of Month.	Day of the Week.	Rises. h. m.	Sets. h. m.	Length of Days. h. m.	Sets. h. m.
1	S.	4 37	7 4	14 27	8 5
2	M.	4 38	7 2	14 24	8 44
3	Tu.	4 39	7 1	14 22	9 19
4	W.	4 40	7 0	14 20	9 53
5	Th.	4 41	6 59	14 18	10 28
6	Fr.	4 42	6 58	14 16	11 4
7	Sa.	4 43	6 56	14 13	11 42
8	S.	4 44	6 55	14 11	morn
9	M.	4 45	6 54	14 9	0 24
10	Tu.	4 46	6 52	14 6	1 9
11	W.	4 47	6 51	14 4	1 58
12	Th.	4 48	6 50	14 2	2 49
13	Fr.	4 49	6 48	13 59	3 43
14	Sa.	4 50	6 47	13 57	rises
15	S.	4 51	6 45	13 54	7 13
16	M.	4 52	6 44	13 52	7 42
17	Tu.	4 53	6 42	13 49	8 10
18	W.	4 54	6 41	13 47	8 38
19	Th.	4 55	6 39	13 44	9 7
20	Fr.	4 56	6 38	13 42	9 39
21	Sa.	4 57	6 36	13 39	10 12
22	S.	4 59	6 35	13 36	10 51
23	M.	5 0	6 33	13 33	11 36
24	Tu.	5 1	6 32	13 31	morn
25	W.	5 2	6 30	13 28	0 28
26	Th.	5 3	6 28	13 25	1 28
27	Fr.	5 4	6 27	13 23	2 35
28	Sa.	5 5	6 25	13 20	3 48
29	S.	5 6	6 24	13 18	sets
30	M.	5 7	6 22	13 15	7 14
31	Tu.	5 8	6 20	13 12	7 50

FARM HINTS FOR SEPTEMBER.

This month the corn harvest should begin. Before harvesting go through the fields and select those well filled ears which ripen first, and so mark them that they may be saved for seed when the husking is done. Such care will cause future crops to ripen earlier. Remember that good seed, plenty of fertilizer and thorough cultivation are the essentials for producing good crops.

The manure on hand in the barn-yards may be used now or at any time next month. That which is fine and well rotted should be used as a top-dressing for the poorer meadows, while the coarsest and green manure should be spread upon the surface and

plowed under where potatoes will be

planted next year. If plowed before the

grass is killed by frost, the sward will decay so that it may be easily worked next

year. The green crop plowed under will add much to the fertility of the soil.

Do not disfigure the lawns by spreading manure upon them, but let them wait until

next spring and then apply the Perfect Lawn Dressing (see page 24).

Wheat should be sown this month, and in all cases from 200 to 400 pounds of the Fertilizer should be sown with it, as it makes the straw stand better without lodging, and makes a plumper, more floury grain, and a larger crop.

It is too early to sow rye for the grain, but a little sown this month may be cut early in the spring for fodder before the pasture is fit to turn the cattle into. In harvesting corn cut up at the roots, as soon as the grain is well glazed and put in well made stooks. The grain ripens as well and the fodder is much better than when the wasteful practice of cutting up stalks is followed. The corn sown in drills is ready to cut when the tassels are in bloom. If not needed for green-feeding, and no silos are prepared, it may be well cured if put in large stooks after wilting a day or two. Put a pole in the centre of the stook to prevent blowing over. But it will pay to have a silo. One built of plank in the corner of the barn will cost but little, and keeps the ensilage as well as a \$500 cellar of stone and cement. Force the fattening animals with all they will eat. It costs less to make meat now than in cold weather. Now is the time to use the Perfect Food for Fruit Trees to make fruit buds for next year's crop.

Day of Month.	Day of the Week.	Rises. h. m.	Sets. h. m.	Length of Days. h. m.	Sets. h. m.
1	W.	5 9	6 18	13 9	8 25
2	Th.	5 10	6 17	13 7	9 2
3	Fr.	5 11	6 15	13 4	9 41
4	Sa.	5 12	6 13	13 1	10 22
5	S.	5 13	6 12	12 59	11 6
6	M.	5 14	6 10	12 56	11 54
7	Tu.	5 15	6 8	12 53	morn
8	W.	5 16	6 6	12 50	0 45
9	Th.	5 18	6 5	12 47	1 38
10	Fr.	5 19	6 3	12 44	2 32
11	Sa.	5 20	6 1	12 41	3 29
12	S.	5 21	6 0	12 39	4 27
13	M.	5 22	5 58	12 36	rises
14	Tu.	5 23	5 56	12 33	6 42
15	W.	5 24	5 54	12 30	7 11
16	Th.	5 25	5 52	12 27	7 41
17	Fr.	5 26	5 51	12 25	8 13
18	Sa.	5 27	5 49	12 22	8 50
19	S.	5 28	5 47	12 19	9 32
20	M.	5 29	5 45	12 16	10 20
21	Tu.	5 30	5 43	12 13	11 15
22	W.	5 31	5 42	12 11	morn
23	Th.	5 32	5 40	12 8	0 16
24	Fr.	5 34	5 38	12 4	1 24
25	Sa.	5 35	5 36	12 1	2 36
26	S.	5 36	5 35	11 59	3 50
27	M.	5 37	5 33	11 56	sets
28	Tu.	5 38	5 31	11 53	6 18
29	W.	5 39	5 29	11 50	6 55
30	Th.	5 40	5 28	11 48	7 34

FARM HINTS FOR OCTOBER.

Although the wide awake farmer has something to harvest nearly every month in the year, perhaps this month deserves to be called the harvest month, as more harvesting is done than in almost any other month. Finish up the potato digging and get in beets and carrots now. Turnips and winter cabbage may stand longer. Apples should be picked as quickly as possible. In doing this too much care cannot be taken to handle them carefully, to assort them so that those offered as No. 1 shall all be strictly first quality, and those sold as No. 2 shall be decently good, at least, and let them be well-packed in clean barrels or boxes. A dirty package, or a

few small or wormy apples in a barrel will reduce the market price of the whole. After picking it is not too late to use the Perfect Food for Fruit Trees and Vines in the orchard, though it will increase the size of the fruit next year more than the number of fruit buds. Where much fruit is grown it will pay to have a Fruit Dryer. The fruit dried in this way is much better than that dried by the method of exposing to sun and flies. If cider is made, use only sound apples free from dirt and tobacco quids, and put in clean casks; then convert it into pure vinegar or apple jelly. Select scions now for spring grafting. Get good thrifty twigs of this year's growth, but not those which have grown too rapidly, as such are often too tender. Tie in bundles and mark, then place in cellar, and pack in moss to prevent drying. Slips from currants, gooseberries and grape-vines may be cut this month, and "heeled in" in some spot a little sheltered, and they will be ready for setting in the early spring. Every farmer should devote land enough to these small fruits, so that he can supply his table liberally with them. Now sow winter rye, and use either the 203 Fertilizer or the Fine Ground Bone as a fertilizer for it. The Bone may be used liberally and will enrich the land for years. As insects are now gone from the field the poultry will need a little meat, and nothing can be better for this purpose than the Granulated Beef Scraps prepared by us. The Poultry Invigorator should form a part of each day's ration whenever soft food is given, but is especially needed when the hens are moulting. It brings them out in good health, vigorous and ready to begin laying at once. It will also make the chickens grow rapidly.

First Quarter, 4th day, 5h.
33m., evening.
Full Moon, 12th day, 10h.
24m., evening.
Last Quarter, 20th day, 9h.
41m., morning.
New Moon, 27th day, 2h. 15m.,
morning.

Day of Month.	Day of the Week.	Rises. h. m.	Sets. h. m.	Length of Days. h. m.	Sets. h. m.
1	Fr.	5 41	5 26	11 45	8 15
2	Sa.	5 42	5 24	11 42	9 0
3	4.	5 43	5 22	11 39	9 48
4	M.	5 45	5 21	11 36	10 38
5	Tu.	5 46	5 19	11 33	11 32
6	W.	5 47	5 17	11 30	morn
7	Th.	5 48	5 16	11 28	0 27
8	Fr.	5 49	5 14	11 25	1 23
9	Sa.	5 50	5 12	11 22	2 19
10	S.	5 51	5 10	11 19	3 16
11	M.	5 53	5 9	11 16	4 14
12	Tu.	5 54	5 7	11 13	5 12
13	W.	5 55	5 6	11 11	rises
14	Th.	5 56	5 4	11 8	6 15
15	Fr.	5 57	5 2	11 5	6 51
16	Sa.	5 58	5 1	11 3	7 30
17	S.	5 59	4 59	11 0	8 16
18	M.	6 1	4 58	10 57	9 8
19	Tu.	6 2	4 56	10 54	10 6
20	W.	6 3	4 54	10 51	11 10
21	Th.	6 4	4 53	10 49	morn
22	Fr.	6 5	4 51	10 46	0 18
23	Sa.	6 7	4 50	10 43	1 29
24	S.	6 8	4 48	10 40	2 41
25	M.	6 9	4 47	10 38	3 54
26	Tu.	6 10	4 45	10 35	5 6
27	W.	6 12	4 44	10 32	sets
28	Th.	6 13	4 43	10 30	6 6
29	Fr.	6 14	4 41	10 27	6 49
30	Sa.	6 15	4 39	10 24	7 37
31	S.	6 17	4 38	10 21	8 28

FARM HINTS FOR NOVEMBER.

As cold weather may be expected now, prepare for it by banking up around house and barn, stopping all cracks, mending all broken windows, and in every way try to make all buildings comfortably warm. To keep up the normal temperature when the weather is freezing cold, requires an extra amount of fattening or heat giving food (in other words, of grain), and that costs more than it would to make buildings snug. Harvest the turnips and cabbages now. The leaves are excellent food for young stock. The small turnips for feeding should be put where they can be kept until the late spring, as they will be of greater benefit to the animals then than

First Quarter, 3d day, 0h. 5m., evening.

Full Moon, 11th day, 2h. 6m., evening.

Last Quarter 18th day, 5h. 40m., evening.

New Moon, 25th day, 2h. 18m., evening.

Day of Month.	Day of the Week.	Rises. h. m.	Sets. h. m.	Length of Days. h. m.	Sets. h. m.
1	M.	6 18	4 38	10 20	9 21
2	Tu.	6 19	4 36	10 17	10 16
3	W.	6 20	4 35	10 15	11 11
4	Th.	6 22	4 34	10 12	morn
5	Fr.	6 23	4 32	10 9	0 9
6	Sa.	6 24	4 31	10 7	1 6
7	S.	6 25	4 30	10 5	2 3
8	M.	6 27	4 29	10 2	3 1
9	Tu.	6 28	4 28	10 0	4 1
10	W.	6 29	4 27	9 58	5 1
11	Th.	6 30	4 26	9 56	6 2
12	Fr.	6 32	4 25	9 53	rises
13	Sa.	6 33	4 24	9 51	6 13
14	S.	6 34	4 23	9 49	7 3
15	M.	6 35	4 22	9 47	8 0
16	Tu.	6 37	4 21	9 44	9 3
17	W.	6 38	4 20	9 42	10 9
18	Th.	6 39	4 19	9 40	11 17
19	Fr.	6 40	4 18	9 38	morn
20	Sa.	6 42	4 18	9 36	0 27
21	S.	6 43	4 17	9 34	1 37
22	M.	6 44	4 17	9 33	2 47
23	Tu.	6 45	4 16	9 31	3 58
24	W.	6 46	4 15	9 29	5 7
25	Th.	6 48	4 15	9 27	6 14
26	Fr.	6 49	4 14	9 25	sets
27	Sa.	6 50	4 14	9 24	6 15
28	S.	6 51	4 13	9 22	7 8
29	M.	6 52	4 13	9 21	8 3
30	Tu.	6 53	4 13	9 20	9 0

now. The cattle will be better off in the stables or yards now, than in the fields. Whatever of grass they might find there would be so injured by the frost as to contain but little nutrition, and it should be left as a protection to the roots during the winter. Gather leaves for use as bedding, they are excellent for that purpose, and they greatly enrich the manure heap. Every farmer should try to make a large and rich heap of barn-yard manure. Then use a good fertilizer, like the 203, with it, to supply the phosphoric acid and potash which are deficient in the stable manure. Young trees set now will be as ready to start in the spring as if they had not been moved, if the work is properly done. See directions on page 22. After setting make a mound of fine earth around the trunk of the tree about a foot in height and raising the ground as far as the roots extend, to keep water from standing and freezing among the roots. Do not use sods for this purpose lest it afford shelter for mice which may gnaw the bark and destroy the tree. Take the tender varieties of grapes from the trellises and lay them on the ground covering slightly with earth. Also lay down the raspberries if there is any doubt about their hardiness. While doing this is a good time to cut away superfluous wood upon the grape vines, and remove last year's wood from the raspberries and blackberries, leaving only thrifty canes of this year's growth. When the ground is frozen two or three inches deep, cover the strawberries with evergreen boughs, leaves, cut straw or other material, but not so deep as to smother the plants. Continue the daily use of the Poultry Invigorator.

FARM HINTS FOR DECEMBER.

The care of the farm stock will form a large part of the work for the next three months. To see them well fed and cared for and to watch their condition, so that any indications of disease may be noticed at once, should be the work of the farmer each day. It is too often entrusted to careless or inexperienced men or boys, with the idea that anyone can "do the chores," but the master's eye is worth more than his hands, and if he does not perform the labor, he should see that it is done, and properly done. The experienced eye will often note when a change in feed is desirable, or when some disease has taken a slight hold, and prompt care may save

First Quarter, 3d day, 9 h. 25m., morning.
Full Moon, 11th day, 4h. 30m., morning.
Last Quarter, 18th day, 1h. 39m., morning.
New Moon, 25th day, 4h. 55m., morning.

Day of Month.	Day of the Week.	 Rises. h. m.	 Sets. h. m.	Length of Days. h m.	 Sets. h. m.
1	W.	6 54	4 12	9 18	9 57
2	Th.	6 55	4 12	9 17	10 54
3	Fr.	6 57	4 12	9 15	11 51
4	Sa.	6 58	4 12	9 14	morn
5		6 59	4 12	9 13	0 49
6	M.	7 04	4 11	9 11	1 47
7	Tu.	7 14	4 11	9 10	2 46
8	W.	7 14	4 11	9 10	3 47
9	Th.	7 24	4 11	9 9	4 49
10	Fr.	7 34	4 11	9 8	5 52
11	Sa.	7 44	4 11	9 7	rises
12	S.	7 54	4 12	9 7	5 50
13	M.	7 64	4 12	9 6	6 52
14	Tu.	7 74	4 12	9 5	7 59
15	W.	7 74	4 12	9 5	9 9
16	Th.	7 84	4 13	9 5	10 18
17	Fr.	7 94	4 13	9 4	11 28
18	Sa.	7 94	4 13	9 4	morn
19	S.	7 104	4 14	9 4	0 37
20	M.	7 104	4 14	9 4	1 46
21	Tu.	7 124	4 15	9 3	2 54
22	W.	7 124	4 15	9 3	4 0
23	Th.	7 124	4 16	9 4	5 5
24	Fr.	7 124	4 16	9 4	6 6
25	Sa.	7 134	4 17	9 4	sets
26	S.	7 134	4 18	9 5	5 50
27	M.	7 134	4 18	9 5	6 47
28	Tu.	7 144	4 19	9 5	7 43
29	W.	7 144	4 20	9 6	8 42
30	Th.	7 144	4 20	9 6	9 40
31	Fr.	7 144	4 21	9 7	10 37

a valuable animal. Do not allow the cattle to stand shivering in the yards all day, or keep them out longer than is necessary in cold storms. Stables should be well lighted and well ventilated. If they are not the animals should be given more time out of doors even if it be not so warm. Store pigs should be kept growing, but not fattened. A few roots every day are very good for them, especially for breeding sows. They need dry and warm beds as much as other animals. Keep up the use of the Poultry Invigorator for fowls, and keep a supply of meat scraps, and cracked bone or oyster shells by them constantly. Eggs bring a good price at this season of the year. As the people of the United States consume over \$600,000,000 worth of poultry and eggs annually, and import millions of dozens of eggs, there is little fear of the market being overstocked. Put Insect Destroyer in the nests to destroy hen lice.

Have regular hours for feeding all farm stock, and do not allow them to stand and worry because not fed at the proper time. Worry will take flesh from the animal as well as from the human race. Cut and get home fuel enough for a year's use, so that it may be well seasoned before it is needed. There is great waste in burning green or wet wood. It should be kept under cover after it is seasoned. Every farmer should have a supply of ice in the summer, and now is the time to get it. A cheap ice-house will keep ice quite as well as an expensive one if it is well packed with straw, tan-bark or shavings.

Please report what success you have had with our goods during the past year. We are always glad to hear from our customers or see them at our office, or to show them through our factory.

TO FARMERS AND GARDENERS.

Coming before the public with our goods as we did, late in the spring of 1885, after many of the farmers had purchased their fertilizers for the season, and having to compete with those who had already long established reputations as manufacturers of good fertilizers, we did not anticipate a large demand for our goods the first season. Still less reason had we to expect it, as we were not announced by any preliminary blowing of our own trumpet through the newspapers, and the little pamphlet which we issued was of the most modest and inexpensive description.

But our success far exceeded our expectations, as the orders which we received were sufficient to keep our factory running at its full capacity from the time our mill was started, until the farmers had finished their spring planting, and this without the expenditure of a dollar for advertising in the newspapers. If we had spent one-tenth part as much money as some of our competitors in advertising we probably could not have supplied the demand. And we have had no reason to complain of the trade during the summer and fall, though it is never as great in New England, as is the spring trade.

Encouraged by this success and by the good reports which we have received from our local agents, and from those who have used the fertilizer, we have increased the size of our factory, and added new and improved mills and machinery, which gives us more than five times the producing capacity which we had last spring. We have also manufactured a considerable quantity during the dull season, which we hope will enable us to supply all demands promptly with goods which have been made under such conditions as allow of all proper care in making up, and which have had plenty of time for that "seasoning," which should take place before a fertilizer is placed upon the market.

The public may rest assured that we shall strictly adhere to our motto of "High grade goods at low prices" and that we shall keep our fertilizers up to the same standard in strength, fineness and dryness as that which we have made during the past year, and which has given such universal satisfaction to those who have tried it.

THE COMPOSITION OF OUR FERTILIZERS

will remain the same in the future as in the past. The nitrogen will be derived from organic matter, principally from dried and ground fish, fine ground bone and from night soil. The latter is treated by a new process, by which the moisture is expelled and the ammonia and other valuable fertilizing elements (which every farmer knows it to contain in large quantities) are concentrated and saved.

We, by our contracts with Boston and other large cities, are able to obtain large quantities of these materials at low cost. We thus make our fertilizer at a lower price than we could if we had to purchase our ammoniating material at market rates, and we obtain it in the very best form for fertilizing purposes. Nitrogen when furnished in this form gradually becomes available by the decomposition of the organic matter, and is thus supplied to the plant during its entire season of growth, carrying it forward to maturity, while if supplied in the form of chemicals which dissolve in the first rain, it must be taken up by the plant during the first stages of its growth (often in excess of its requirements and acting as an over-stimulant), or it is wasted, either by chemical changes in the soil, or by being carried down beyond the reach of the plant roots. Thus the plant, though making a rank and luxuriant growth early in the season, fails to carry out the promise of its early growth, from a lack of sufficient nutrition when approaching maturity.

Our phosphoric acid is derived from our ground fish and from fine ground raw bone, and as the latter is only partially treated with sulphuric acid, a part of the phosphoric acid is available for the immediate wants of the crop, while the remainder will become available in the soil.

Many fertilizer manufacturers have placed great stress upon the amount of "phosphoric acid soluble in water" which their fertilizer contained, and led the public to believe that this was all important. This error (for it is an error) has been encouraged, to a certain extent, by the reports of the agricultural chemists, who have published values of various fertilizing elements, in which they rate "phosphoric acid soluble in water" much higher than "reverted phosphoric acid," or that which is soluble in citrate of ammonia, though classing both as "available phosphoric acid." But it must be remembered that these are trade values only showing the price at which they can be bought, and do not accurately represent the manurial value. A Carolina rock phosphate, or one made from Canadian apatite, when treated with sulphuric acid, may thus be made to show a high commercial value, based upon the amount of soluble phosphoric acid it contains, but it should be remembered that the tendency to change back to an insoluble form is much greater in the rock phosphate than in that made from fresh ground bone or fish, and also that it is doubtful if the insoluble phosphoric acid from the rock will ever become available in the soil while it is well known that the fish and bone, even when not treated with acid, do become available, though not as rapidly as if the acid were used.

A few careful scientific investigators have protested against this excessive valuation of solubility in a phosphate, claiming that the plant does not take its phosphoric acid when simply united with water, but only when united with the ammonia, and that the costly labor of dissolving the phosphate with sulphuric acid does not make it more valuable or more readily available as plant-food.

Practical farmers also think that their experience proves that the soluble phosphoric acid from the rock phosphates is liable, by chemical changes after it is mixed with the soil, to assume a condition in which it is not available for plant-food, while the fine ground bone and fish, though its phosphoric acid is insoluble in water when applied, does become available by the process of decomposition in the soil.

We therefore supply a part of our phosphoric acid in a soluble form that the plant may find enough during its early growth and we know that the rest will become available as the plant advances in size.

For our potash we use only the highest grades of potash salts, and it will be noticed that we express its strength by the term "potassium oxide" or actual potash, while some others simply name a percentage of potash, which sometimes means only potash salts, which may contain less than one-half that amount of "potassium oxide."

The fine and dry condition in which our fertilizers are sent out are a great advantage to the buyer, as they are easily distributed by hand or by the machine. The fine particles can be evenly diffused through the soil, and are ready to furnish food to the fibrous or feeding roots of the young plant, and the farmer is not paying fertilizer price for an excess of water.

Upon these two points Professor Goessman, Massachusetts State Inspector of Fertilizers, says "the degree of pulverization controls, almost without exception, under similar conditions, the rate of solubility, and the more or less rapid diffusion of the different articles of plant-food throughout the soil. The state of moisture exerts a no less important influence in the pecuniary value in case of one and the same kind of substance." And again, "I do not intend to convey the idea that the addition of a larger percentage of water exerts no other serious influence on a complete fertilizer than diluting the article, that

is, reducing its original strength; for changes of a more serious character are apt to occur. For instance, in case nitrates are forming a source of nitrogen in a fertilizer containing superphosphates, more or less of nitric acid will be rendered free, and thus directly or indirectly the amount of that costly ingredient is reduced. The frequent occurrence of rotten bags in the fertilizer trade finds a satisfactory explanation in circumstances similar to those pointed out."

Farmers will do well to remember this. When the fertilizer rots the bags, it indicates that there is too much moisture in it, and that the most costly element in it is reduced. Dole's 203 Fertilizer is sent out dry, and does not rot the bags. In a sample taken by Professor Goessman from a bag sold by one of our agents, without knowledge on our part, he found only 8.83 per cent. moisture. Many of the higher priced fertilizers show 12 to 14 per cent. moisture, while cheaper ones show from 20 to 26 per cent. or 350 pounds of water in a ton more than ours.

Artificial Fertilizers compared with Farm-yard Manure.

It is not claimed that artificial fertilizers can take the place of stable manure for all purposes, or upon all soils. In many cases the latter is nearly as valuable for the mechanical effects it has upon the soil, before and during the process of decomposition, as for the fertilizing qualities it contains. We, therefore, advise farmers to carefully save and use all the manure they can make upon their farms, and to strive by the feeding of rich food to their animals, and by preventing waste of the liquids, to make their manure heap as rich as possible.

But there are some cases where the artificial manures are better than the best of stable manure.

In well drained and porous soils where the nitrogeneous elements leach down below the plant roots, the fertilizer, if properly made, is better, because it becomes available just when the plants are ready for it, and need not be applied in excess of the wants of the plants. Such soils need manuring almost every year, and it can be done at much less cost with the artificial manures.

Fields long in cultivation and heavily manured, will be much benefited by a change to artificial manures for one year at least, as the supply of phosphoric acid and potash in stable manures is not in proportion to the nitrogen in them or to the wants of the plants, and becomes exhausted. These elements are supplied by our fertilizers.

Old pastures, long cropped by milch cows, and not cultivated for a long time, will often give wonderful results when plowed and planted upon a phosphate alone. It not only supplies needed elements, but the turning under of the accumulations upon the surface, and putting them where they will decompose and become available for plant-food, reveals a mine of fertility when assisted by fertilizer enough to give the crop a fair start and growth while the process of decomposition is going on.

In fields which are distant from the stables, or difficult to reach with team, the concentrated form of the fertilizer saves much labor, and often proves the cheaper method of enriching the soil, or growing the crop.

When the farmer has not manure enough to put on as much land as he has time to cultivate, and has to purchase manure, he should remember that a ton of ordinary stable manure contains 1500 pounds of water, and in purchasing it, he has just so much extra weight to handle, and when the cost of handling is added to the first cost of the manure, it makes a great expense to properly fertilize an acre, and the 500 pounds of dry matter in the ton of ordinary

manure contains only about the same amount of potash, one-fourth as much phosphoric acid and (if very rich manure and well cared for) about twice as much nitrogen as the same weight of our 203 Fertilizer. Compare the cost and results of 500 pounds of fertilizer with one ton or even five tons of barnyard or stable manure, and we think you will choose the former, even though it may not be as lasting in its effects. "The nimble sixpence is better than the slow shilling," says the old adage. But where phosphoric acid and potash are needed by the soil (as they are in most soils), an application of phosphate only amounting to one-half the cost of the stable manure, will be found as lasting.

There are no weed seeds in the fertilizer, therefore it is easier to keep the fields clean, and the crop receives the full amount of the fertilizer used, but this is not always an advantage, as the careless farmer, seeing no weeds to kill, will not stir his soil as often as he should.

Can the farmer purchase his material and make his fertilizer himself more cheaply than he can buy it already mixed?

We say he cannot. The trade in fertilizing material is mostly in the hands of the manufacturers of fertilizers, and they do not care to sell material unless they get as much profit on it as they do on their manufactured goods. The farmer cannot buy in the market the material to make a ton of phosphate of the same strength as our 203 without paying more than we obtain for a ton.

If he were buying, for cash, enough to make a hundred tons, and could be sure that he obtained just what he paid for, he might come very near to our wholesale price. It cannot be as finely ground and thoroughly mixed by hand as it would be by the heavy machinery which we use for that purpose. This mixing the various materials together and incorporating their particles is very important.

The only way in which a farmer can save anything by mixing his fertilizer himself, is by leaving out some element which his soil already contains in abundance. Very few farmers have a sufficient knowledge of the chemistry of their plants or soils, to attempt to decide what their soil does or does not need.

Can the soil be analyzed so as to tell what it needs?

This is not practical, because of the difficulty of obtaining soil which is a fair sample of the whole field, and, also of the small percentage of the fertilizing elements in the soil. A half ton of the best Peruvian Guano would be a liberal application for an acre, but if well mixed with the earth six inches deep there would be about one pound of nitrogen in twenty-nine tons. Very few chemists carry their analyses far enough to find that amount.

Can the crops be analyzed so as to tell us what we need to furnish them in a fertilizer?

This has been tried repeatedly, but experience proves that it is not a reliable guide. The clover shows almost three times as much nitrogen in its analysis as does green corn fodder, yet it is less benefited by the application of nitrogeneous manures.

The analysis of the cabbage shows more than twice as much potash as does the potato, but good hard wood ashes are worth more as a manure for potatoes than for cabbages. Many other instances might be given, but these are used as familiar to all farmers.

Some plants have the power of taking nitrogen from the atmosphere. Some cannot obtain a sufficient supply of potash unless the soil contains much more than they can take up. Others seem to take all the available potash in the soil, and even (like the mosses) to be able to extract enough for their wants from the solid rock.

But enough has been said to prove the error of attempting to make special fertilizers for different crops excepting where well-known differences exist in habits of growth, or where experience has proved that a change in amount or form of some material is desirable.

In the few various special fertilizers which we make we have been guided by the experience of some of the best practical farmers in all sections where fertilizers are used, and by the knowledge which we have gained during years of careful study and experience in the business.

Can fertilizer be used as a substitute for manure profitably, without exhausting the soil?

We answer without hesitation, that it can if properly made, and used in sufficient quantities. The experiments which have been continued for many years by Messrs. Lawes & Gilbert, of England, should be conclusive evidence of this. Prof. Caldwell, of Cornell University, N. Y., said in an address to the Massachusetts Horticultural Society, "Facts show that commercial fertilizers do contain all the food required by crops, and that, with their assistance only, a farm can be brought up from a low condition to a higher one, and held there for a series of years. And no one can show that what is true of farm crops should not be true of garden and fruit crops." He also says that, "profitable crop growing can be carried on for at least many years with commercial fertilizers alone."

A. W. Cheever, editor of the *New England Farmer*, and a practical farmer, says: "Thousands have proved that crops can be grown continuously on the same land without the application of any form of stable manure whatever. When we learn to apply fertilizers as freely as the best farmers have applied farm manures, we shall hear less complaint of the unprofitableness of farming. The better class of fertilizers are not so very evanescent as to make their liberal use wasteful. Phosphoric acid and nitrogen in steamed bone will largely remain in a good soil until taken up by the growth of plants. Potash, in whatever form, is not readily washed through the soil and wasted."

He might have said the same thing in regard to the phosphoric acid and nitrogen from fish waste, and from night soil.

While we claim to make as strong a fertilizer as any in the market, we believe in a liberal use of it, when sufficient pains is taken to mix it with the soil, to prevent killing the seed, and we know that it will produce a lasting good effect on the soil.

OUR PRICES DEFY COMPETITION. LOOK AT THEM!

Dole's No. 203 Fertilizer, \$35.00 per ton.

GUARANTEED ANALYSIS.

Nitrogen,	3 to 4 per cent.
Phosphoric Acid, Total,	10 to 12 "
" " Available,	8 to 10 "
Potassium Oxide,	3 to 4 "

See page 24 for prices of Dole's Perfect Lawn Dressing.

If there is no agent in your town, send to or call at our office.

DOLE FERTILIZER CO.

120 COMMERCE STREET,

BOSTON, MASS.

DIRECTIONS FOR USE.

Always remember that this is a highly concentrated and powerful manure, and when it is used in the hill or drill, it should not be allowed to come in contact with the seed until it has been well mixed with the soil.

For Oats, Barley, Wheat, Rye and Buckwheat, use from 200 to 400 pounds per acre, harrowed or drilled in with the seed. This will increase both straw and grain; cause the straw to stand up better, lessen the liability of blight or rust, give the roots strength to withstand the severities of winter or of a long drought, and make a heavier, plumper grain.

For Carrots, Beets, Parsnips and Turnips, use 300 to 400 pounds per acre, and for **Onions** from 600 to 800 pounds, harrowed into the soil before the seed is sown. When those sown without the fertilizer are not growing fast enough, you may sow a little between the rows, at the second hoeing, and hoe it in.

For Potatoes, use 300 pounds per acre if in hills and 500 pounds if in drills. This increases the yield, and makes the tubers smoother, of better quality, and less liable to scab or rot.

For Corn, use a large tablespoonful to the hill (about 300 pounds to the acre), and mix with the soil before dropping the seed. This gives a more vigorous growth, causes earlier ripening, and increases the yield of sound grain.

For Fodder Corn, sow 300 to 400 pounds per acre in the drill, and mix with the soil before sowing the corn.

For Hungarian Grass, or Millet, or for Seeding Down to Grass, without grain, use 300 to 400 pounds per acre, sown broadcast, and harrowed in before sowing the seed. It will ensure a good catch, and a good growth.

For Top-Dressing Grass Land, sow about 400 pounds per acre, broadcast, as early as possible after the ground thaws in the spring. An application immediately after mowing will give a good second crop if there is a good turf and sufficient rain fall soon.

For Beans in hills, use as advised for Corn.

For Beans and Peas in drills, use same as for Fodder Corn.

For Cabbages and Tomatoes, put a handful in the hill when they are transplanted, and as much more around it at second hoeing.

For Cucumbers, Melons and Squashes, mix a tablespoonful with the soil in the hill before planting, and when the vines begin to run, apply about 400 pounds per acre, sown broadcast between the hills. Work this well into the soil.

For Strawberries, early in the spring sow 1000 pounds per acre, broadcast, and work into the soil. An application after the fruit is gone, will produce vigorous and healthy young plants for setting new beds. Apply only when the vines are dry.

For Currants, Raspberries and Blackberries, sow liberally along the rows, and mix well with the soil, as early in the spring as the ground can be worked. This will produce finer fruit, and cause earlier ripening.

For Asparagus, sow from 1000 to 2000 pounds per acre, when digging over the bed in the spring. An old bed requires more fertilizer than a new one.

For Tobacco, use 1000 pounds per acre to grow the plants, and at transplanting, use as directed for Cabbages and Tomatoes.

When stable manure is used, it should be plowed in upon heavy clay land, or such as needs draining, as it will assist in keeping the soil light and mellow. On light, sandy or porous soils, it should be harrowed in. It should also be put deeper for root crops than for grain crops, or for vines.

Only a light dressing is needed when the fertilizer is used according to above directions. Where the land is light and poor, the amount of fertilizer used may be increased if sufficient care is taken to prevent it from coming in direct contact with the seed, or the roots of the plant.

Good Crops can be grown upon the Fertilizer alone.

Good cultivation should always accompany liberal manuring, as that which makes the crops grow, will also make the weeds grow.

SPECIAL FERTILIZERS.

For certain crops we have prepared Special Fertilizers differing in some ingredients, or in their combination, from the 203 Fertilizer, and, as we have said before, these changes have been made as the result of experience, and not upon fanciful theories, however plausible.

DOLE'S POTATO FERTILIZER

will contain a larger percentage of potash than the 203, and the potash will be the Sulphate of Potash, as it has been found that upon some soils, especially those which are wet, heavy and undrained, that the chlorine contained in the Muriate of Potash is injurious to the eating quality of the potato, making it watery when cooked. This fertilizer will, however, be furnished at the same price as the 203.

DOLE'S GRASS FERTILIZER (Top-Dressing)

will have a considerable part of its nitrogen furnished in the form of nitrates which will dissolve quickly, so that after the first rain the plant-food will be carried into the earth where it may be readily seized upon by the grass roots. This is important, as many farmers neglect to top-dress their grass ground until they can see that the yield is likely to be a small one. Then a fertilizer has need to be more rapid in its action than the 203 or any ordinary phosphate.

By the use of chemicals we are able to make this fertilizer very rich in both nitrogen and potash, and we are obliged to increase the cost in proportion. It will be sold at \$2.10 per bag of 100 lbs., or \$42 per ton.

For statements of the result of our 203 as a grass top-dressing when used in March or early in April, see the testimonials from farmers who used it last year, and also from the Adjutant General's office.

DOLE'S PERFECT FOOD FOR FRUIT TREES AND VINES.

In preparing this fertilizer we have so compounded it, as to promote a

thrifty and healthy growth of wood, increase the quantity of fruit, and improve rather than deteriorate its quality.

We endeavor to avoid the effects of a too powerful stimulating manure, which causes a tender growth, unable to withstand the ordinary changes of weather, or the attacks of insects or disease. Such fertilizers as horse manure, cotton seed, dried blood or fish scraps, cause too much growth of wood and foliage at the expense of the fruit, and materially injure both flavor and keeping qualities of the fruit which is an important consideration, whether fruit is grown for market or for home consumption.

We guarantee this fertilizer to produce a vigorous but healthy growth of wood, and a fruit solid and firm in texture, fine in color, and of the highest flavor.

We also guarantee it as a sure preventive of the BLIGHT IN PEAR TREES, OR THE YELLOWS IN PEACH TREES, if used freely according to directions, and the hardiness and vigor of trees grown upon it, and the great number of fibrous roots which they throw out, enable them to better withstand the severities of winter or long protracted droughts.

DIRECTIONS FOR USE.

In setting young trees mix from half a pint to a pint of the fertilizer thoroughly with the earth that was thrown out of the hole, before replacing it. The larger the tree, and the greater the amount of earth thrown out the greater the amount of fertilizer that may be used without liability of injury to the roots. As this fertilizer is very strong it should not be placed in direct contact with the roots until well mixed with earth.

Increase the amount used to each tree, and extend the area over which it is spread, each year, endeavoring to keep it near the extremities of the roots (which usually extend farther than the branches) rather than near the trunk.

When the trees begin bearing, sow the fertilizer broadcast through the orchard, and work well into the soil, using from 500 to 1000 pounds per acre, according to condition of soil, and distance between trees. Always endeavor to keep up a thrifty but not too rapid growth of wood.

In old orchards sow broadcast about 1000 pounds per acre and harrow it in. If the trees are stunted and moss-grown from lack of proper manuring or care, do not use too much fertilizer the first year, but apply again more liberally the next year.

Apply early in spring if a growth of wood is desired, but at mid-summer when you wish only to induce the formation of fruit buds for the next year's crop.

For Grape Vines, when setting use about one-half the amount used for setting trees, and in the same manner; after the second-year sow broadcast, and work into the soil.

For Currants, Blackberries, Raspberries, etc., mix with the soil along the rows, using about three pounds to the rod of drill.

For Strawberries apply in the fall, or early in the spring, at the rate of 1000 pounds per acre, and work into the soil. Take care not to have it come in contact with the leaves, as it is so powerful it will be liable to burn them. If vigorous plants are needed for setting a new bed, an application may be made after picking the fruit; then apply above amount to soil before setting the plants.

This will also be found a strong and lasting fertilizer for Asparagus. From 1000 to 2000 pounds per acre should be applied as early in the spring as the ground can be worked. Mix well a few inches below the surface. Old beds need more fertilizer than new ones.

"Blight" on Pear Trees and the "Yellows" on Peach Trees.

To cure Blight on Pear Trees, apply "Dole's Perfect Food for Fruit Trees and Vines," by sowing it on the ground under the trees, extending at least one foot beyond any limbs. When the ground is well covered, stir it over with a fork, but be careful not to put the fork in over one inch in depth, as the fine fibrous roots are mostly near the surface, and would be more or less injured by a deeper stirring of the soil. The Food should be as near the surface as it can be, and have it covered with the soil; both the soil and Food should be thoroughly mixed together and finely pulverized. When this is done, remove and burn every blighted limb, cutting back into good sound wood; then with whale oil soap, or any cheap bar soap, rub thoroughly over every cut made on the tree, and also over the limbs and trunk from as high as can be reached to within one or two feet of the ground. The soap will put new life and vigor into the bark, help it to grow, and cover the cuts. It will also keep insects from the tree and will drive those away which may be on it.

On all trees affected, the application of Food and the cutting back should be immediate. Trees not affected should be treated with the Food as a preventive; it will also help the tree

TO FORM FRUIT BUDS FOR ANOTHER YEAR

and to make a healthy and vigorous growth in the spring.

Early in spring make another application of the Food to the trees, and if at any time the blight should reappear (as it may from affected limbs not noticed), repeat the cutting back, use the soap freely, renew the application of the Food and give a plentiful supply of water. Use no stable manure as it makes too rapid growth and furnishes germs which cause the disease.

PEACH AND CHERRY TREES.

For Peach and Cherry Trees apply the Food as directed for Pear Trees, and if the trees are affected with disease, examine them closely, cut away and burn all diseased limbs, and scrape off any gum which may be found on the trunk and branches, leaving the bark clean and smooth. Then rub the soap into all cuts or bruises made in taking off the gum.

When a new growth of wood starts, cut off all dead branches. Use the Food both in autumn and spring, and you will be rewarded for all labor and expense by having thrifty trees bearing fruit much improved in size, color and flavor.

Peach Trees affected with the Yellows will be cured, if not too far gone, and others will be so vigorous as to resist the disease.

The same treatment will prove equally beneficial to Plum and Quince Trees.

FRUIT TREES IN GENERAL.

All Fruit Trees and Vines will be greatly improved by the use of this Food. Stable manure promotes too great a growth of wood, and should be used very sparingly, if at all.

Analysis of Dole's Perfect Food for Fruit Trees and Vines.

Nitrogen,	3 to 5 per cent.
Equal to Ammonia,	4 to 6½ "
Available Phosphoric Acid,	8 to 10 "
Total Phosphoric Acid,	9 to 12 "
Potassium Oxide,	8 to 10 "

PRICE, \$40 PER TON.

PERFECT LAWN DRESSING.

We recommend our Perfect Lawn Dressing, as being superior to stable manure for the following reasons:

It is fine and dry, therefore easily applied by hand, sowing in such a manner as to be evenly distributed over all parts of the field, or to allow a larger amount to be put upon any knolls or other points not naturally as rich as the rest of the plat.

As it is nearly all soluble, a slight rain, a sprinkling with water, or even a few heavy dews are sufficient to carry the fertilizing elements into the soil wherever it is cast, when they will readily be reached and taken up by the plants, while if barn-yard manure is used as a top-dressing, every rain washes a large part of its valuable properties into the lower portions of the land which need it least, or perhaps entirely away into adjoining fields and brooks.

The Lawn Dressing is clean and odorless, and can be applied in the spring, or at intervals throughout the summer, without offending either the organs of sight or smell, while the stable manure should be applied in the fall, and disfigures the ground for nearly half the year.

The labor of applying the stable manure is tenfold greater than that of sowing the Lawn Dressing.

The Lawn Dressing contains no weed seeds, while the stable manure is full of them.

The Lawn Dressing is much cheaper, as a few pounds of it will be found as effective as a load of stable manure, and will cost much less.

NOTE THE FOLLOWING PRICES.

10 lb. Bags sufficient for one year on 1000 square feet,	\$.40
25 " " " " " " 2500 " " "	.75
50 " " " " " " 5000 " " "	1.38
100 " " " " " " 1-4 acre . . .	2.50

DIRECTIONS FOR USE.

Sow when the grass is perfectly dry, and when the wind is so slight as to allow sowing evenly.

If the land is very light and thin, it may be well to make another application two or three weeks after the first.

FOR FLOWER BEDS

the Perfect Lawn Dressing is well adapted, by reason of its convenience in handling, the entire absence of odor, and freedom from seeds.

It may be applied in the same quantity as for lawns in the spring, before setting plants or sowing seed, and well raked into the soil near the surface, or it may be worked in around the roots at any time through the season, if it is thought that any of them are not growing or blooming fast enough. Some plants, by their habits of growth, require more fertilizer than others.

Take care not to get it upon the leaves, or in direct contact with the roots, as it is so powerful it might do injury when used in that way.

PURE FINE GROUND BONE.

We have had many calls for this article, from those who think it is better than a manufactured fertilizer, because more lasting, or who feel that they furnish in other manures all that their lands need, excepting the bone element. To accommodate such parties we have prepared a number of tons, which we guarantee to be strictly pure. No waste lime, oyster shells or plaster is ground with it. While we do not believe it to be as profitable for the farmer to buy for general use and on all crops as our 203 Fertilizer, we know that it shows good results upon some soils, and usually proves a profitable investment when put upon land that is to be seeded down to a permanent grass crop. It gives best results when sown broadcast at the rate of from 600 to 1000 pounds per acre, and well harrowed in before sowing the seed. Where the soil needs potash (as most of old soils do), a mixture of 1500 pounds of the bone, and 500 pounds Muriate of Potash, sown upon two or three acres before seeding, will benefit the land for years. We furnish the Bone without mixing or we will mix with potash in any proportion desired, and supply potash at market rates. We can mix more thoroughly in our machines than can be done by hand. The Bone is put up in bags of 100 pounds, or in barrels, at \$1.75 per cwt., or \$35 per ton.

THE ATTENTION OF POULTRY KEEPERS AND DEALERS IN POULTRY SUPPLIES is respectfully invited to our advertisements on pages 34 and 35. Our Poultry Invigorator has been extensively used during the fall and winter, and has proved the best thing in the market for preventing or curing diseases among poultry, and for increasing the egg production. Notwithstanding the very low price at which it is sold, many of our customers say a pound of it is worth more than a pound of some of the preparations which sell at 25 or 50 cts per pound.

Our Ground Beef Scraps are fresh ground from each week; our Cracked Oyster Shells are screened from all dust, and both are entirely free from objectionable smells. Our Insect Destroyer is all that is claimed for it.

GARDENERS are invited to try our Currant Worm Exterminator and our Bug and Worm Repellent. They contain no poisons, and are safe to use anywhere. EVERYBODY ought to use our Disinfectants which are advertised on page 36. We believe in *First Class Goods Light Expenses, Low Prices Small Profits and Quick Sales*, and are always glad to show samples and quote prices of our goods.

 This Company has no connection with the so-called "Common Sense Fertilizer Co," and is entirely distinct from it.

TESTIMONIALS.

In accordance with the usual custom, we herewith present some statements from those who have used our fertilizers during the past season. Want of space prevents us from printing only a few of the many testimonials we have received, and which are on file at our office, but these are sufficient to show the result of our goods in the field.

Up to this date, we have heard of but one party who used our goods, who did not think they were as good as any he had used, and perhaps his lack of success was not the fault of the fertilizer. (What other company can say as much?)

We propose to make them equally good every year, and invite you to give them a fair trial.

Respectfully yours,

DOLE FERTILIZER CO.

Jan. 1, 1886.

120 Commerce St., Boston.

"Never saw so heavy a Crop anywhere."

3 MERCHANTS ROW, BOSTON, Dec. 18, 1885.

GENTLEMEN—You will doubtless remember that when I saw you last spring, I was very reluctant to try your fertilizer, having made up my mind to use barn-yard manure upon my grass land.

I was the more confirmed in this, as the superintendent of my farm advised me strongly against fertilizers and said he never saw one that was worth anything for grass.

But as I could not get the manure that I wanted, I did purchase one ton and a half from you and used it according to your directions.

Early in the season, I cut a heavy crop of grass where I used it. The crop was so heavy that we could not run a machine through it, and we had to mow it by hand.

When it was cut the superintendent said he never saw so much grass cut on a piece of land of that size, either in the old country, or in this country. And I certainly never saw so heavy a crop anywhere. I am much pleased with the result of my trial of your goods, and can recommend them to any one, as being cheaper and easier to handle than stable manure.

SAMUEL W. THORNDIKE.

As a Grass Top-dressing.

ADJT. GEN.'S OFFICE, BOSTON, MASS., July 2, 1885.

GENTLEMEN—About the middle of March we applied ten tons of your fertilizer to the State Camp Ground at South Framingham, where the soil is light and dry, and the grass crop poor.

Notwithstanding the fact that we used but one-half the quantity to the acre which you recommended, the results have been extremely satisfactory. A good crop of grass was cut during the last week in May, on that part of the field where the fertilizer was used, and the fine appearance of the parade ground has been the cause of much favorable comment. From the appearance of the turf and growth of the grass, I consider the purchase of your fertilizer a most excellent investment for the State.

SAMUEL DALTON, Adj. and Quartermaster General.

METCALF, MASS., Sept. 5, 1885.

GENTLEMEN—I have used Dole's 203 Fertilizer with good results on corn, oats and potatoes. Also as a top-dressing, and it can't be beat for that use.

J. T. MORRILL.

H. A. SNOW, of Metcalf, also says under same date: "As a top-dressing Dole's 203 Fertilizer has no equal. And for potatoes, corn, etc., it has proved as good as any fertilizer I have used, and cheaper."

Market Garden Crops.

[From a market gardener who has been in the business over seventy years.]

WESTFORD, MASS., Aug. 27, 1885.

GENTLEMEN—I have used your fertilizer this year on corn, potatoes, strawberries, beans and peas, and find it the best fertilizer I have ever used. I tried it by the side of another kind very popular here, which cost me \$5 per ton more than yours. I used them side by side in alternate rows so that there might be a fair test, and to get the soil alike on both kinds, and yours gave *best results in every case*. I would willingly pay \$5 per ton more for yours than for the other.

R. STEPHEN.

ARLINGTON, MASS., Sept. 12, 1885.

GENTLEMEN—Having tried the 203 Fertilizer this year upon peas, sweet corn, cauliflowers and cabbages, we are much pleased with it, and with the results obtained from its use. One lot of cabbages which we planted on the fertilizer without any manure has grown finely. In about 25,000 plants on which we used it, nearly every one has made or is making a large and solid head. We have used higher priced fertilizers in years past, but think yours has done as well as any of them, and better than some.

GEO. H. HUTCHINSON & Co.

Since writing the above, Mr. H. has called at the office, and says his cabbages grown on our fertilizer without any other manure were as good as any he had.

"Best Crop I ever had in my Life."

DEDHAM, MASS., Nov. 24, 1885.

GENTLEMEN—I am pleased to say that your fertilizer exceeded my expectations in a great degree. I have raised the best crop of cabbages that I ever had in my life, solely on your fertilizer, and I have raised cabbages for about fifteen years.

This was done upon land which has been manured with fertilizer only for the past three years.

I also planted two pieces of pickles. On one I used only your fertilizer, and upon a piece of land where I have used only fertilizer for the last seven years, and the result was more than double the crop I obtained where I used manure. And the land upon which I used the manure was much better than that where the fertilizer was used.

I used from seven to ten bags (100 lbs. each) per acre. Think many who use fertilizers do not use enough.

H. A. MERRILL.

POTATOES.**"Beats his old Favorite."**

NORTHFIELD, MASS., Oct. 19, 1885.

GENTLEMEN—I planted two acres of potatoes (Burbank seedling). On one-half the field I used your fertilizer, on the other half another kind costing more than yours, and which I have always preferred to any other that I have used, until this year. Where I used yours the potatoes were much larger, and there were very few small ones.

H. M. WARD.

"Far beyond his Expectations; far Superior to Any of Them."

S. LANCASTER, MASS., Sept. 30, 1885.

GENTLEMEN—I feel it a duty as well as a pleasure to give my testimony to the virtue of your fertilizer. I had last spring four tons, two of which were used for corn and two for potatoes. It has proved in both cases far beyond my expectations.

On the potatoes I used a fair coat of stable manure lightly plowed under, and put the fertilizer in the drills, and I have a large crop (for this year) of nice large smooth potatoes, with but few small ones. I have not harvested the corn yet, but it is heavy in fodder and also in corn. The fertilizer proved equally good upon roots and in the garden.

I have used fertilizers manufactured by quite a number of different parties, but I consider yours, which I used this year, to be far superior to any of them.

C. E. WHEELER.

"Much Stronger than other kinds I have Used."

HUBBARDSTON, MASS., Dec. 11, 1885.

GENTLEMEN—I used your 203 Fertilizer this year by the side of a kind much used here; used the same quantity of each, and in same field. Where I used the 203 the crop was much better than on the other, excepting that in some hills I neglected to properly mix the fertilizer with earth before dropping the seed, and it was so much stronger than other kinds that I have used, that it killed the seed.

I also tried it on potatoes, and got one-third greater crop where I used fertilizer alone than where I used a good coat of stable manure. I shall use no other kind next year.

F. W. THOMPSON.

WESTFORD, MASS., Sept. 15, 1885.

GENTLEMEN—I used the 203 Fertilizer during the past season, and had excellent results from it. I used it alongside of another fertilizer that cost more per ton than yours, and the crops raised from yours were fully equal to those raised from the other.

HENRY KEYES.

Under date of Oct. 6, 1885, WM. MANN of West Medway says that Dole's 203 Fertilizer is as good as any fertilizer in the market, and he obtained best results from it this year.

 This Company has no connection with the so-called "Common Sense Fertilizer Co.," and is entirely distinct from it.

EAST HOLLISTON, MASS., June 11, 1885.

GENTLEMEN—Please send me — bags of your fertilizer to finish out. I think your goods are as good, if not better than — or —, and fifty cents per hundred weight cheaper.

GEO. A. WHITING.

MEDWAY, MASS., Sept. 26, 1885.

I am satisfied with the results obtained with the use of Dole's 203 Fertilizer. Had best results upon sandy soil for potatoes, and had good yield of corn.

S. B. HIXON.

I. T. MORRILL of Metcalf, Mass., sends word that he has used a ton of the 203 Fertilizer this year on corn, oats and potatoes, and he is much pleased with the results.

CHARLTON, MASS., Sept. 9, 1885.

GENTLEMEN—I tried the 203 Fertilizer last spring on corn and potatoes, and I will say that I think it is better than — as the yield is as large, and the price is \$5 per ton less.

LUTHER AMMIDOWN.

"The Best Article for Farmers to Buy."

CHARLTON, MASS., Sept. 10, 1885.

GENTLEMEN—I think your fertilizer is all you claim for it. I planted corn, and tried yours and — and — side by side, and Dole's is full ahead of both others, and as it is from \$5 to \$10 per ton cheaper than they are, it is the best article for the farmer to buy.

JACKSON PHELPS.

"So Dry it does not Gum up and Stop the Machine."

FRANKLIN, MASS., Oct. 14, 1885.

GENTLEMEN—I did not use your 203 Fertilizer in such a way as to give it a trial in comparison with the others that I used, as I used yours in the hill, and the others were hoed in around growing crops. I found yours the best of any to use in the corn planter, as it was so dry that it did not gum up, and stop the machine, as did all the others.

LUCIUS W. DANIELS.

MANSFIELD, MASS., Nov. 10, 1885.

GENTLEMEN—I have tried Dole's 203 Fertilizer this year on potatoes and ensilage corn. On the latter I used no other manure. I had good crops of both. I have used higher priced fertilizer in years past, and think this has done as well as any of them. I found the fertilizer much dryer, and in better condition to sow than are most of the other kinds.

ELIJAH COPELAND.

 This Company has no connection with the so-called "Common Sense Fertilizer Co.," and is entirely distinct from it.

CHARLTON, MASS., Sept. 9, 1885.

GENTLEMEN—I used Dole's 203 Fertilizer on my corn and potatoes and think, all things considered, that it is better than a higher priced kind which I have used.

N. D. WOODBURY.

HUBBARDSTON, MASS., Dec. 12, 1885.

GENTLEMEN—I tried your 203 Fertilizer on potatoes and fodder corn last spring. It was quite late when I got it, but I had good crops of both. On the potato ground I put a light coat of stable manure and plowed it in, using a spoonful or so of phosphate in the hill. The potatoes were very large and smooth, and there was a large yield.

The fodder corn had a little manure spread on a part of the field, but the crop on the fertilizer alone was a large one.

W. M. GREEN.

ROXBURY, MASS., Dec. 18, 1885.

GENTLEMEN—I used your 203 Fertilizer on my garden during the past season, and was very much pleased with the results obtained from it. It made corn grow very rapidly, and the ears were large and full. As compared with stable manure, the results were equally good, and there was a noticeable absence of weeds where the fertilizer was used. On my lawn where I sowed it, the grass was very fine and heavy. I shall certainly want to use your fertilizer another year.

JAMES H. WORK,
16 Schuyler St.

MILTON, MASS., Dec. 19, 1885.

GENTLEMEN—I used your Fertilizer upon my family garden, and cultivated it upon fertilizer alone. The 203 is the best thing I have tried for corn and vegetables. The Potato Fertilizer I think keeps the bugs away and forces growth.

F. H. DUDLEY.

MELROSE, MASS., Dec. 21, 1885.

GENTLEMEN—I used your Potato Fertilizer, and am more than satisfied with it, as I harvested the best crop of potatoes where I used it that I ever raised. I have also used your Lawn Dressing on lawns and landscape gardens for other parties, and in every case it has given perfect satisfaction.

FRANK GIBBONS,
Landscape Gardener.

SILVER LAKE, MASS., Dec. 22, 1885.

GENTLEMEN—We have sold your Fertilizer during the past year, and hear uniformly good reports from its use. We judge it to be among the best now before the public.

CO-OPERATIVE STORE Co.
By H. B. MAGLATHLIN, Pres.

 This Company has no connection with the so-called "Common Sense Fertilizer Co.," and is entirely distinct from it.

"More than twice as much Corn."

WEST KINGSTON, R. I., Dec. 30, 1885.

GENTLEMEN—I used about one-half ton of your 203 Fertilizer, which I purchased of your agents in this place, the past season, and am more than well pleased with the result. It was used on corn on land in very poor condition, with but a small amount of stable manure spread on and plowed in. I have planted this same field twice before, since I have lived here, and I think that I got more than twice as much corn this season as at the other times I planted it.

JOHN WOODMANSEE.

S. EASTON, MASS., Nov. 30, 1885.

GENTLEMEN—I was much pleased with the results of my potato experiment which I made with Dole's Fertilizer. I plowed in a light dressing of stable manure and scattered the fertilizer in the drill with an equal bulk of plaster. The yield was 100 bushels merchantable potatoes per acre, and they were uniformly clean and large.

FRANCIS HOMES.

MELROSE, MASS., Jan. 4, 1886.

GENTLEMEN—I have used your Fertilizer on grain crops the past season, with perfectly satisfactory results.

E. P. CUTLER.

A strong statement from a florist and gardener of over forty years' experience.

MELROSE, MASS., Dec., 27, 1885.

GENTLEMEN—Allow me to congratulate you on the success you have had in producing a perfect fertilizer. I have used it extensively the past year in my greenhouses, and have never found its equal for rose bushes and other flowering plants. I also tried it on my vegetable garden with satisfactory results. As I have been in business more than forty years, and have found this the best plant-food I have ever used, I can with perfect confidence recommend it to any one who wants a fertilizer for rose bushes, flowering plants or a vegetable garden.

D. L. TAYLOR.

Another One.

WINCHESTER, MASS., Jan. 4, 1886.

GENTLEMEN—I used your Fertilizer on my vegetable garden, also on my flower beds. It worked wonders for me, and gave better results every way than any thing I ever used, in the bloom of flowering plants and roses. I had the finest vegetables I ever raised.

P. W. SWAN.

More satisfactory than those that are higher priced.

BROCKTON, MASS., Dec. 28, 1885.

GENTLEMEN—I would say in regard to the Dole's Fertilizer bought of you last spring, that I used it on good land with good stable manure, side by side with other fertilizers which were higher priced, and the result was far more satisfactory with the Dole than with the others. I had a large crop of nice smooth potatoes and the best crop of squashes I ever raised. You are at liberty to print this, as I shall use the Dole's next year, and shall recommend it to all to whom I have a chance.

D. D. SANFORD.

Double the Crop.

MATFIELD, MASS., Jan. 4, 1886.

GENTLEMEN—I have used the 203 Fertilizer for a top-dressing on grass with good results on a piece of old ground. I cut double what I did before using it. Used 400 pounds to the acre.

JUSTIN W. RICHARDS.

Give ours the preference over those which cost \$5 per ton more.

EAST TAUNTON, MASS., Jan. 2, 1886.

GENTLEMEN—I used your 203 Fertilizer last spring on potatoes in comparison with other first-class fertilizers. I used them in equal quantities, and in the same field, planted at the same time. The crop was quite as good on yours as on the others. If there was any difference, it was in favor of yours, and as yours did not cost as much as the others by \$5 or more per ton, I propose to give yours the preference next year.

H. E. GUELLO.

Two good Crops in one Season.

BROCKTON, MASS., Dec. 28, 1885.

GENTLEMEN—I used Dole's 203 Fertilizer last spring on a small piece of land for barley. Raised a good crop, which I cut for fodder. Then plowed it again, put on more of your fertilizer (no other manure was used either time), sowed barley again August 7th, and I got another good crop. I think your fertilizer has done as well for me as any I ever used, and I have tried several kinds which are sold in this city.

G. H. FARRAR.

The kind for Farmers to buy.

SWANTON, VT., Jan. 5, 1886.

GENTLEMEN—Having used several kinds of fertilizers for the past few years, I tested yours besides two of the best grades of fertilizers made, both of which cost more than yours, using equal amounts of each variety with same crops. At first there seemed to be no visible difference in the looks of the growing crops, but as the season advanced it became more and more noticeable, and as the crops neared maturity, there seemed to be those lasting qualities (so essential to a first-class fertilizer) which to a casual observer would decide at once which was the best, but the true test was demonstrated when harvest time came, showing a much larger yield in favor of your fertilizer. Therefore I can confidently recommend it to all farmers who want a first-class fertilizer and do not know what kind to buy.

It does certainly pay to use it in general farming, as I have tested it to my entire satisfaction.

E. P. ADAMS.

 This Company has no connection with the so-called "Common Sense Fertilizer Co.," and is entirely distinct from it.

"A Thorough Trial."

ALLENTON, R. I., Jan. 18, 1886.

GENTLEMEN—I used your number 203 Fertilizer last season with satisfactory results. It being a new article in this section, I gave it a thorough trial side by side with other higher priced fertilizers, and will say that I shall use it the coming season, as the result is as good and the price less than all others that I have used.

JAMES A. MATTERSON.

Was well pleased with the Results.

ALLENTON, R. I., Jan., 1886.

GENTLEMEN—We used some over a ton of your 203 Fertilizer and was well pleased with the results. Shall use it again, as the result appears to be as good as that from higher priced fertilizers.

PHILLIPS BROS.

APRONAUG, R. I., Jan. 18, 1886.

GENTLEMEN—When I planted potatoes last spring I put your Fertilizer by the side of two others on the same field. One of the others cost twenty cents per hundred more than yours, but yours gave me full as good a crop as that did, and much better than the other.

GEO. B. BLACKMAR.

Of five kinds Dole's proves "as good as the best."

MARSHFIELD, MASS., Oct. 31, 1885.

GENTLEMEN—Last spring I used five different kinds of fertilizer to experiment with. Used them on light soil for rye, and on heavier soil for grass and squashes. I used at the rate of 750 pounds to the acre for rye and grass, and 400 pounds to the acre for squashes. I could see no difference between two kinds, but a marked difference between them and the other three. The Dole's 203 was as good as the best, and but one other kind equal to it.

CHAS. S. PETERSON.

"It paid a big Profit."

CHARLTON, MASS., Sept. 9, 1885.

GENTLEMEN—I sowed 750 pounds of the 203 Fertilizer on my grass land, the 28th of April, and it paid a big profit, but I think it would have done even better if it had been sowed earlier in the season. But I know it will tell next year.

ALFRED MOWER.

Tall Corn on Fertilizer Alone.

STONEHAM, Jan. 25, 1886.

GENTLEMEN:—I am well satisfied with your fertilizer which I used last spring. I found it dryer than the others I have used and the crops grew as well as on those which cost higher prices. I raised fodder corn upon it, without any other manure, which grew from twelve to fifteen feet high; one row near the centre of the field was left without any phosphate, and that did not grow one-half as tall. The fertilizer also proved good on my potatoes and in the garden.

JOHN G. BEEDE.

INSECT DESTROYER.

Poultry raisers often suffer great loss from insects which breed on the bodies of the fowl, in the nests, or in cracks and crevices of the roosts and walls. On the latter an occasional brushing with kerosene will serve to kill the insects.

In the nests of the setting fowl these insects do the most damage, often driving the hen from the nest before the eggs are hatched, or breeding in such numbers as to destroy the life of the tender chicken in a few days after it is hatched.

Kerosene is unsafe to use there, as it requires but very little to penetrate the egg and kill the chicken within it. It is also too powerful to use upon young chicks.

For this purpose we have prepared our Insect Destroyer. It is largely composed of fine tobacco, with which other ingredients are mixed. This we shall sell in

Bags of 5 lbs. at 30c., 10 lbs. at 50c., 50 lbs. at \$2.00.

This will also be found the best thing to use to destroy insects upon house plants, or for Florists and Market Gardeners to use in their greenhouses or under their hot-bed sashes.

DIRECTIONS.

For poultry, put a handful in each nest, and scatter a little over the body of the fowl. For plants, scatter it over them when slightly wet; or it may be used for fumigating plants by burning a little in a close room, or under a barrel.

DOLE'S CURRANT WORM EXTERMINATOR.

Safer, more effectual, and much cheaper than Hellebore. Not poisonous to man or beast, but

SURE DEATH TO CURRANT WORMS.

Two or three applications sufficient for the entire season!

Having thoroughly tested this for three years we guarantee that no worm will be seen where it is used according to directions.

One pound box, 15 cts.; five pound box or bag, 60 cts.

Ten pound bag, \$1.00. Special prices in bulk.

DOLE'S BUG AND WORM REPELLENT.

Sure to drive away Army Worms, Cut Worms, Squash and Cucumber Beetles, etc., etc.

To be used on the soil around the plants. A fertilizer as well as a repellent of insects.

One pound box, 15 cts.; five pound box or bag, 60 cts.

Ten pound bag, \$1.00. Special prices in bulk.

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DOLE'S DISINFECTANT.

PURIFY YOUR DWELLINGS.

EVERY FAMILY SHOULD USE DOLE'S DISINFECTANT.

It is a positive Deodorizer and Germicide, and should be used in and around privy vaults, cesspools, drains, etc., and in the sick room in cases of Cholera, Diphtheria, Typhoid, Typhus, and other fevers. It will absolutely destroy all poisonous germs of disease in the atmosphere, and remove all disagreeable and unwholesome odors.

See what is said of it by a company who probably have used and do use daily more disinfectant than any one else in the State.

Boston, June 27, 1885.

DOLE FERTILIZER Co., 120 Commerce St., Boston.

GENTLEMEN—After using a number of barrels of your Disinfectant in our business, we are satisfied that it is a most excellent preparation for disinfecting purposes, and we should recommend it to any parties who may have occasion to use such an article for destroying odors from badly smelling vaults or drains.

THE ODORLESS EXCAVATING CO.,
C. A. YOUNG, Supt.

NEWPORT HOUSE, NANTASKET, MASS., Aug. 24, 1885.

GENTLEMEN—I have used your Disinfectant upon my premises this season and find it the best thing I have ever seen to remove all unpleasant smell from water closets, drains, swill barrels or other places.

CHAS. W. RICHARDSON.

MAYFLOWER COTTAGE, NANTASKET, MASS., Aug. 24, 1885.

GENTLEMEN—Having used your Disinfectant this season at my place, I am glad to say that it is the best thing I ever saw for the purpose. It will instantly remove any bad smell from any place where I have had occasion to use it. You cannot praise it too highly.

DANIEL McGRATH.

PUTNEY HOUSE, NANTASKET, MASS., Aug. 24, 1885.

GENTLEMEN—I cheerfully endorse all that Mr. McGrath has said in favor of your Disinfectant, and recommend it to all Hotel keepers or others who have vaults, drains or other places which are liable to bad odors.

GEO. E. PUTNEY.

Boston, Mass., Sept. 7, 1885.

GENTLEMEN—I have used your Disinfectant in my factory and at my house, and I find it will remove all bad odors from vaults, sewers or drains, quicker than any other thing I have seen. A single slight application does the work at once.

JOSEPH MEASURES, 141 and 143 Portland St.

One pound boxes	\$.15
Five pound boxes	.60
Twenty-five pound boxes	2.25

SPECIAL PRICES BY THE BARREL.

DOLE'S CANKER WORM INK

for protecting the trees from that destructive insect, which destroys both the beauty and the usefulness of so many of our orchards and shade trees.

This ink will be found superior to most of the preparations sold for the purpose, as it contains nothing injurious to the tree, and it will remain soft enough to entrap the insect, much longer than the others.

Directions for Use.

Place a band of tarred paper around the trunk of the tree, three or four feet from the ground. With a brush cover this band thoroughly with the ink. If the ink coats over, or gets covered with insects, make another application. Keep the paper covered with ink as long as the insects abound.

PRICE.

3 lb. cans,	.	.	.	.	.	.	.	.	.	\$.40
5 lb. cans,	.	.	.	.	.	.	.	.	.	.55
10 lb. cans,	.	.	.	.	.	.	.	.	.	1.00

LIBERAL DISCOUNTS TO DEALERS.

A FEW FACTS ABOUT MANURES

should be known and understood by farmers.

The farmer who adds to his manure heap material to absorb the liquids and prevent their waste, or who mixes other material with it to increase its strength, or who mixes the various kinds of manures together, thereby becomes a fertilizer manufacturer. His success will depend largely upon his knowledge of the value of the various materials he uses.

To a certain extent the tables on the next page will be useful to him in his work; but he should remember that the chemical analyses of fertilizing materials are not always a sure guide to their agricultural value.

The best way to be done by the farmer who does not understand chemistry, is to compost all the manure he has, using sufficient absorbents with it to prevent the loss of either ammonia or the soluble salts, and then to use with it a fertilizer like the "Dole's," which contains all the fertilizing elements needed for plant growth.

While we recommend our fertilizers as being cheaper than stable manure for those who have to buy manure, we consider the stable manure valuable for its mechanical effects upon the soil as well as for its fertilizing qualities, and we advise every farmer to save, and keep under cover, all that he can make upon his farm. Be especially careful not to allow any waste of the liquid manure, as it contains some of the most valuable elements of fertility.

That farmers may know the comparative value of the manure they have at hand, we republish the following tables from the "Talks on Manures," by Joseph Harris, and recommend the entire book for the careful study of farmers.

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AVERAGE COMPOSITION OF VARIOUS MANURES.

NAME OF FERTILIZER.	Water.	Organic Substance.	Ash.	Nitrogen.	Potash.	Soda.	Lime.	Magnesia.	Phosphoric Acid.	Sulphuric Acid.	Silica and Sand.	Chlorine and Fluorine.
I.—ANIMAL EXCREMENTS.												
(In 1000 parts of Manure.)												
Fresh Faeces:												
Horse.....	757	211	31.6	4.4	3.5	0.6	1.5	1.2	3.5	0.6	19.6	0.2
Cattle.....	838	145	17.2	2.9	1.0	0.2	3.4	1.3	1.7	0.4	7.2	0.2
Sheep.....	655	314	31.1	5.5	1.5	1.0	4.6	1.5	3.1	1.4	17.5	0.3
Swine.....	820	150	30.0	6.0	2.6	2.5	0.9	1.0	4.1	0.4	15.0	0.3
Fresh Urine:												
Horse.....	901	71	28.0	15.5	15.0	2.5	4.5	2.4	....	0.6	0.8	1.5
Cattle.....	938	35	27.4	5.8	4.9	6.4	0.1	0.4	..	1.3	0.3	3.8
Sheep.....	872	83	45.2	19.5	22.6	5.4	1.6	3.4	0.1	3.0	0.1	6.5
Swine.....	967	28	15.0	4.3	8.3	2.1	....	0.8	0.7	0.8	....	2.3
Fresh Dung (with straw):*												
Horse.....	713	254	32.6	5.8	5.3	1.0	2.1	1.4	2.8	0.7	17.7	0.4
Cattle.....	775	203	21.8	3.4	4.0	1.4	3.1	1.1	1.6	0.6	8.5	1.0
Sheep.....	646	318	35.6	8.3	6.7	2.2	3.3	1.8	2.3	1.5	14.7	1.7
Swine.....	724	250	25.6	4.5	6.0	2.0	0.8	0.9	1.9	0.8	10.8	1.7
Common Barn-yard Manure:												
Fresh.....	710	246	44.1	4.5	5.2	1.5	5.7	1.4	2.1	1.2	12.5	1.5
Moderately rotted.....	750	192	58.0	5.0	6.3	1.9	7.0	1.8	2.6	1.6	16.8	1.9
Thoroughly rotted.....	790	145	65.0	5.8	5.0	1.3	8.8	1.8	3.0	1.3	17.0	1.6
Drainage from Barn-yard Manure.....												
Human Faeces, fresh.....	772	198	29.9	10.0	2.5	1.6	6.2	3.6	10.9	0.8	1.9	0.4
" Urine ".....	963	24	13.5	6.0	2.0	4.6	0.2	0.2	1.7	0.4	....	5.0
Mixed human excrements, fresh.....												
Mixed human excrements, mostly liquid.....	955	30	15.0	3.5	2.0	4.0	1.0	0.6	2.8	0.4	0.2	4.3
Dove Manure, fresh.....	519	308	173.0	17.6	10.0	0.7	16.0	5.0	17.8	3.3	20.2	....
Hen " ".....	560	255	185.0	16.3	8.5	1.0	24.0	7.4	15.4	4.5	35.2	....
Duck " ".....	566	262	172.0	10.0	6.2	0.5	17.0	3.5	14.0	3.3	28.0	....
Geese " ".....	771	134	95.0	5.5	9.5	1.3	8.4	2.0	5.4	1.4	14.0	....
II.—COMMERCIAL MANURES.												
(In 100 parts of Fertilizer.)												
Peruvian Guano.....	14.8	51.4	33.8	13.0	2.3	1.4	11.0	1.2	13.0	1.0	1.7	1.3
Norway Fish-Guano.....	12.6	53.4	34.0	9.0	0.3	0.9	15.4	0.6	13.5	0.3	1.6	1.1
Pulverized Dead Animals.....	5.7	56.9	37.4	6.5	0.3	0.8	18.2	0.4	13.9	1.0	1.7	0.2
Flesh-Meal.....	27.8	56.6	15.6	9.7	....	....	7.0	0.3	6.3	0.1	1.1	....
Dried Blood.....	14.0	79.0	7.0	11.7	0.7	0.6	0.7	0.1	1.0	0.4	2.1	6.4
Horn-Meal and Shavings.....	8.5	68.5	25.0	10.2	....	....	6.6	0.3	5.5	0.9	11.0	....
Bone-Meal.....	6.0	33.3	60.7	3.8	0.2	0.3	31.3	1.0	23.2	0.1	3.5	0.3
Bone-Meal from solid parts.....	5.0	31.5	63.5	3.5	0.1	0.2	33.0	1.0	25.2	0.1	3.0	0.2
Bone-Meal from soft parts.....	7.0	37.3	55.7	4.0	0.2	0.3	29.0	1.0	20.0	0.1	3.5	0.2
Bone-black, before used.....	6.0	10.0	84.0	1.0	0.1	0.3	43.0	1.1	32.0	0.4	5.0	....
Bone-black, spent.....	10.0	6.0	84.0	0.5	0.1	0.2	37.0	1.1	26.0	0.4	15.0	....
Bone ash.....	6.0	3.0	91.0	....	0.3	0.6	46.0	1.2	35.4	0.4	6.5	....
Sulphate of Ammonia.....	4.0	....	....	20.0	....	....	0.5	....	....	58.0	3.0	1.4
Nitrate of Soda.....	2.6	....	....	15.5	....	35.0	0.2	....	....	0.7	1.5	1.7
Common Salt.....	6.0	....	95.0	....	....	44.3	1.2	0.2	....	1.4	2.0	48.2
Gypsum or Plaster.....	20.0	....	80.8	....	....	....	31.0	0.1	....	44.0	4.0	....
Gas-lime.....	7.0	1.3	91.7	0.4	0.2	..	64.5	1.5	....	12.5	3.0	....
Sugar House scum.....	34.5	24.5	41.0	1.2	0.2	0.6	20.7	0.3	1.5	0.3	9.1	0.1
Leached wood ashes.....	20.0	5.0	75.0	....	2.5	1.3	24.5	2.5	6.0	0.3	20.0	....
Wood-soot.....	5.0	71.8	23.2	1.3	2.4	0.5	10.0	1.5	0.4	0.3	4.0	....
Coal-soot.....	5.0	70.2	24.8	2.5	0.1	....	4.0	1.5	....	1.7	16.0	....
Ashes from Deciduous trees.....	5.0	5.0	90.0	....	10.0	2.5	30.0	5.0	6.5	1.6	18.0	9.3
Ashes from Evergreen trees.....	5.0	5.0	90.0	....	....	2.0	35.0	6.0	4.5	1.6	18.0	0.3

*It is estimated that in the case of horses, cattle, and swine, one-third of the urine drains away. The following is the amount of wheat-straw used daily as bedding for each animal. Horse, 6 lbs.; Cattle, 8 lbs.; Swine, 4 lbs.; and Sheep, 0.6 lbs.

QUANTITIES OF SEED REQUIRED TO THE ACRE, ETC.

NAMES.	SPACE AND QUANTITY REQUIRED.
Asparagus	1 oz. produces 1,000 plants, and requires a bed 12 feet square.
Roots	1,000 plant a bed 4 feet wide, 225 feet long.
English dwarf beans	1 qt. plants from 100 to 150 feet of row.
French dwarf beans	1 " " 250 to 350 feet of row.
Beans, pole, large	1 " " 100 hills.
Beans, pole, small	1 " " 300 hills, or 250 feet of row.
Beets	10 lbs. to the acre; 1 oz. plants 150 feet of row.
Broccoli and kale	1 oz. plants 2,500 plants, and requires 40 square feet of ground.
Cabbage	Early sorts same as broccoli, and require 60 square feet of ground.
Cauliflower	The same as cabbage.
Carrot	1 oz. to 150 feet of row.
Celery	1 oz. gives 7,000 plants, and requires 8 square feet of ground.
Cucumber	1 oz. for 150 hills.
Cress	1 oz. sows a bed 16 feet square.
Egg plant	1 oz. gives 2,000 plants.
Endive	1 oz. gives 3,000 plants, and requires 80 feet of ground.
Leek	1 oz. gives 2,000 plants, and requires 60 feet of ground.
Lettuce	1 oz. gives 7,000 plants, and requires seed-bed of 120 feet.
Melon	1 oz. for 120 hills.
Nasturtium	1 oz. sows 25 feet of row.
Onion	1 oz. " 200 " "
Okra	1 oz. " 200 " "
Parsley	1 oz. " 200 " "
Parsnip	1 oz. " 250 " "
Peppers	1 oz. gives 2,500 plants.
Peas	1 qt. sows 120 feet of row.
Pumpkin	1 oz. to 50 hills.
Radish	1 oz. to 100 feet.
Salsify	1 oz. to 150 feet of row.
Spinach	1 oz. to 200 feet of row.
Squash	1 oz. to 75 hills.
Tomato	1 oz. gives 2,500 plants, requiring seed-bed of 80 feet.
Turnip	1 oz. to 2,000 feet.
Watermelon	1 oz. to 50 hills.

THE QUANTITY PER ACRE WHEN PLANTED IN ROWS OR DRILLS.

NAMES.	QUANTITIES.	NAMES.	QUANTITIES.
Broom corn	1 to 1½ bushels.	Onions	4 to 5 lbs.
Beans	1½ to 2 " "	Carrots	2 to 2½ " "

Quantity of Seeds Usually Sown to the Acre.

Barley, broadcast.....2 to 3 bush.	Grass, Timothy..... $\frac{1}{2}$ bush.
Beans, dwarf in hills..... $1\frac{1}{2}$ bush.	Millet..... $\frac{1}{2}$ to 1 bush.
Beans, pole in hills.....8 to 10 qts.	Oats, broadcast.....2 to 3 bush.
Beet, in drills... ..4 to 6 lbs.	Onions, in drills.....4 to 6 lbs.
Broom Corn, in hills.....4 to 6 qts.	Parsnips, in drills.....4 to 5 lbs.
Buckwheat, broadcast.....1 bush.	Peas, early, in drills..... $1\frac{1}{2}$ bush.
Carrot, in drills.....2 to 3 lbs.	Peas, Marrowfat, in drills... $1\frac{1}{4}$ bush.
Corn, in hills.....8 qts.	Peas, broadcast.....3 bush.
Corn, for soiling.... ..3 bush.	Radish, in drills.....6 to 8 lbs.
Clover, Alsike.....5 lbs.	Radish, broadcast.....10 lbs.
Clover, Red alone.....20 lbs.	Rye, broadcast.....1 to $1\frac{1}{2}$ bush.
Clover, White alone.....8 to 10 lbs.	Sorghum.....10 to 12 lbs.
Clover, White with other seeds 4 lbs.	Spinach, in drills.....25 lbs.
Clover, Lucerne alone. ....15 lbs.	Turnip, in drills..... $\frac{1}{2}$ lb.
Cucumber, in hills.....1 to 2 lbs.	Turnip, broadcast.....1 lb.
Grass, Blue alone.....3 bush.	Wheat, in drills..... $\frac{3}{4}$ bush.
Grass, Hungarian..... $\frac{1}{2}$ bush.	Wheat, broadcast..... $\frac{1}{2}$ to 2 bush.
Grass, Lawn.....3 bush.	Clover, { together } 10 lbs. Clover.
Grass, Orchard.....2 to 3 bush.	Timothy, { for } $\frac{1}{4}$ bu. Timothy.
Grass, Red Top.....3 bush.	Red Top, { one acre } 1 bu. Red Top.
Grass, R. I. Bent.....3 bush.	

THE NUMBER OF PLANTS, HILLS, OR TREES CONTAINED IN AN ACRE AT EQUAL DISTANCES APART, FROM 3 INCHES UP TO 66 FEET.

DISTANCE APART.	NUMBER.	DISTANCE APART.	NUMBER.
3 inches by 3 inches	696,960	6 feet by 6 feet	1,210
4 " " 4 "	392,040	6 $\frac{1}{2}$ feet by 6 $\frac{1}{2}$ feet	1,031
6 " " 6 "	174,240	7 feet by 7 feet	881
9 " " 9 "	77,440	8 feet by 8 feet	680
1 foot by 1 foot	43,560	9 feet by 9 feet	537
1 $\frac{1}{2}$ feet by 1 $\frac{1}{2}$ feet	19,360	10 feet by 10 feet	435
2 feet by 1 foot	21,780	11 feet by 11 feet	360
2 feet by 2 feet	10,890	12 feet by 12 feet	302
2 $\frac{1}{2}$ feet by 2 $\frac{1}{2}$ feet	6,960	13 feet by 13 feet	257
3 feet by 1 foot	14,520	14 feet by 14 feet	222
3 feet by 2 feet	7,260	15 feet by 15 feet	193
3 feet by 3 feet	4,840	16 feet by 16 feet	170
3 $\frac{1}{2}$ feet by 3 $\frac{1}{2}$ feet	3,555	16 $\frac{1}{2}$ feet by 16 $\frac{1}{2}$ feet	160
4 feet by 1 foot	10,890	17 feet by 17 feet	150
4 feet by 2 feet	5,445	18 feet by 18 feet	134
4 feet by 3 feet	3,630	19 feet by 19 feet	120
4 feet by 4 feet	2,722	20 feet by 20 feet	108
4 $\frac{1}{2}$ feet by 4 $\frac{1}{2}$ feet	2,151	25 feet by 25 feet	69
5 feet by 1 foot	8,712	30 feet by 30 feet	48
5 feet by 2 feet	4,356	33 feet by 33 feet	40
5 feet by 3 feet	2,904	40 feet by 40 feet	27
5 feet by 4 feet	2,178	50 feet by 50 feet	17
5 feet by 5 feet	1,742	60 feet by 60 feet	12
5 $\frac{1}{2}$ feet by 5 $\frac{1}{2}$ feet	1,417	66 feet by 66 feet	10

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\$1.15. Per ton, \$40.00.
Perfect Lawn Dressing, per bag, 10 lbs. 40c.; 25 lb. bag, 75c.; 50 lb.
bag, \$1.38; 100 lb. bag, \$2.50. Per ton, \$48.00.
Pure Fine Ground Bone, per ton, \$35.00.

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Granulated Raw Bone for Poultry, per bag, 25 lbs., 75c.; 50 lb.
bag, \$1.38; 100 lb. bag, \$2.50. Per ton, \$45.00.
Flour of Bone for Cattle, per bag, 25 lbs., 75c.; 50 lb. bag, \$1.38;
100 lb. bag, \$2.50. Per ton, \$45.00.
Perfect Poultry Invigorator, per bag, 10 lbs., 50c.; 25 lb. bag, \$1.00;
50 lb. bag, \$1.75; 100 lb. bag, \$3.00.
Granulated Beef Scraps, per bag, 10 lbs., 40c.; 25 lb. bag, 75c.;
50 lb. bag, \$1.38; 100 lb. bag, \$2.50.
Fine Ground Beef Scraps, per bag, 10 lbs., 40c.; 25 lb. bag, 75c.;
50 lb. bag, \$1.38; 100 lb. bag, \$2.50.
Cracked Oyster Shells, per bag, 25 lbs., 40c.; 50 lb. bag, 60c.;
100 lb. bag, \$1.00.

Currant Worm Exterminator, 1 lb. box, 15c.; 5 lb. box, 60c.; 10 lb.
bag, \$1.00.
Bug and Worm Repellent, 1 lb. box, 15c.; 5 lb. box, 60c.; 10 lb. bag,
\$1.00.
Disinfectant, 1 lb. box, 15c.; 5 lb. box, 60c.; 25 lb. box, \$2.25.
Canker Worm Ink, 3 lb. can, 35c.; 5 lb. can, 50c.; 10 lb. can, \$1.00.
Insect Destroyer, 5 lb. bag, 30c.; 10 lb. bag, 50c.; 50 lb. bag, \$2.00.

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